

# The 1999 Vermont Youth Risk Behavior Survey

## Statewide Report

How many Vermont teens drink alcohol or smoke cigarettes? Where do they get alcohol and cigarettes? How many use marijuana or cocaine? How many are sexually active, and of those, how many are using condoms? How many have been threatened at school? How many have contemplated suicide? Finding answers to these questions is vitally important. This information can put to rest unwarranted fears when the answers are positive; it can mobilize prevention and intervention efforts when the answers are negative; and it can influence the behavior of students by setting norms.

Every two years since 1985, the Department of Health's Division of Alcohol and Drug Abuse Programs and the Department of Education's Comprehensive School Health Programs have sponsored a survey of Vermont students. The Vermont Youth Risk Behavior Survey (YRBS) measures the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among youth. The YRBS is part of a larger effort to help communities promote the "resiliency" of young people by reducing high risk behaviors and increasing healthy behaviors. The YRBS provides accurate information about Vermont students which enables us to:

- **monitor trends** in their health and risk behaviors
- **compare Vermont** students with a national sample of students
- **plan, evaluate, and improve** community and school programs that prevent health problems and promote healthy behaviors

In 1999, school staff administered the YRBS to 30,563 eighth to twelfth grade Vermont students in 141 schools representing 57 supervisory unions. **For the purposes of this report, data are based on a representative sample of 9,096 Vermont high school and middle school students.** Participation by both schools and individual students was completely voluntary. To protect student privacy, the questionnaire was anonymous. Therefore, it is impossible to identify an individual student's responses.

## How to use the YRBS

The YRBS provides an important piece of the evaluation puzzle. It can help detect changes in risk behaviors over time. It can help identify differences among ages, grades, and genders. It can help focus primary prevention efforts on specific groups of teens, and can suggest whether or not school policies and community programs are having the intended effect on student behaviors.

Think of the YRBS as a tool for starting discussions, for educating the community, for planning and evaluating programs, and for comparing Vermont students with other students nationwide.

- **Starting the Conversation:** Use the YRBS to begin a conversation with teens about the personal choices they make or about the health of their community. Ask them if the results accurately reflect what they see happening around them. How do they explain the results? What ideas do they have about ways to promote healthy behaviors? From their perspective, what seems to be working and what isn't working?
- **Increasing Awareness:** The YRBS provides an opportunity to break through "denial" and to make community members aware of the risks that their young people face. It can also dispel myths and correct misinformation about the "average teenager". The YRBS can be used to accentuate the positive, and to celebrate the fact that many students are abstaining from behaviors that endanger their health and their ability to succeed.
- **Planning and Evaluating Programs:** The YRBS can serve as the basis of a community needs assessment. It can help identify strengths and weaknesses in your community, and can suggest strategies to address those weaknesses.
- **Vermont Trends and National Comparisons:** We have been able to track some information for over 10 years, because Vermont students have been participating in a student survey since 1985. Also, the Centers for Disease Control and Prevention conducts a biennial YRBS of a national sample of high school students. These results permit us to draw comparisons between Vermont and the nation.

## A Word of Caution

The YRBS represents the most complete and most recent information available about risk behaviors among Vermont students. However, the YRBS has some limitations that you should keep in mind when interpreting the results.

- **Data Quality:** Several precautions were taken to ensure the reliability and validity of the results. First, the questionnaire has been carefully designed and thoroughly tested by Centers for Disease Control and Prevention. Second, the survey was anonymous to encourage students to be honest and forthright. Third, over 100 consistency checks were run on the data to exclude careless, invalid, or logically inconsistent answers. Fourth, the results are statistically adjusted or “weighted” so that the sample accurately represents all Vermont 8th to 12th graders. These precautions can reduce some sources of error, but not all. For example, some high risk students such as those who have dropped out of school are not represented in the results.
  
- **Comparing Supervisory Unions to Each Other and to the State:** Participating supervisory unions will receive individual reports summarizing their own results. It is natural to want to know how individual supervisory unions compare to the state overall or to other supervisory unions. We urge caution in making such comparisons because the statewide results are “weighted”, whereas the supervisory union results are not. As a result, it is possible that apparent differences, especially small differences, are due to demographics characteristics, rather than to true differences in prevalence.

## A Special Thanks!

We are grateful to the principals and superintendents who chose to participate in the YRBS and to the teachers and school staff who administered the survey or in other ways supported this effort. We also wish to thank the Centers for Disease Control and Prevention, Division of Adolescent and School Health for sponsoring the statewide survey through a cooperative agreement with the Vermont Department of Education (Program Announcement #309) and Westat Survey Technical Assistance Project for processing and analyzing the data. Finally, we are grateful to the students who took the time and effort to share with us a piece of their lives. This report is our way of thanking all of you. We hope that you find the survey report informative and useful.

The next YRBS is scheduled for 2001. We encourage schools' participation again, because we will be able to continue to monitor trends in students' health and risk behaviors, compare Vermont students with a national sample of students, and plan, evaluate, and improve communities programs which prevent health problems and promote healthy behaviors. If you have any questions or comments about the YRBS, please contact Kelly Hale at the Division of Alcohol and Drug Abuse Programs, Vermont Department of Health (802-651-1557).

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## Basic Information

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### Understanding This Report:

- **Format:** The results are presented as data tables, pie charts, bar graphs, and line graphs. In most cases, the data are organized by gender and grade. All results are expressed as percentages of students who endorsed the responses being reported. The percentages in some pie charts may not total 100 percent due to rounding.
- **Trends:** This report includes 12 to 14 year trends for several behaviors including drinking and driving, and use of alcohol, tobacco, and marijuana. The data for years 1985 to 1991 are not based on the YRBS, but on a Vermont student survey that focused on the use of alcohol and other drugs. The questions from the earlier survey were worded slightly different from the questions on the YRBS: e.g., students were asked about their “monthly use”, instead of their use during “the past 30 days”. In order to adjust for the difference, the trend data for years 1985 to 1991 were estimated. Since the questions were asked both ways on the 1993 and 1995 surveys, we used a simple ratio of the percentages from comparable “monthly” and “30-day” questions to adjust the 1985 to 1991 data.
- ***Healthy Vermonters 2000:*** Vermont has established goals for promoting health and reducing risk behaviors in *Healthy Vermonters 2000*. Goals relevant to the behaviors surveyed by the YRBS are included in the report for your reference. For more information, see *The Health Status of Vermonters* and *Healthy Vermonters 2000 Progress Report*, available from the Vermont Department of Health.

**Remember to look at the positive side.** In most cases the majority of adolescents are NOT engaging in risky behaviors. Although most of the charts are oriented to examining the prevalence of risk behaviors, please do not forget about the percent of adolescents who are NOT engaging in the behaviors.

## Basic Information

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### Description of the Sample

- **Sampling:** Twenty-two Vermont high schools of varying sizes, along with their 30 associated middle schools, were randomly selected for the state sample (1:3 systematic sample after sorting by enrollments). A survey of this size was required in order to have an error rate of +/- 5% at each of the five grade levels.
  - **Response Rates:** The school response rate was 81 percent, and the student response rate was 80 percent. Therefore, the overall response rate was 65 percent ( $.81 \times .80 = .65$ ).
  - **Weighting:** The results were “weighted” in order to compensate for differences between the sample and the population of all 8th to 12th grade students in Vermont. The weighting procedure ensures that the sample is representative of the population. This permits us to draw inferences about the entire student population based on the results of the sample.
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### Vermont Students Who Participated in the YRBS

	GRADE					GENDER		
	8	9	10	11	12	F	M	ALL*
Number of students	1971	2040	1958	1647	1361	4475	4523	9096

\*NOTE: Some students did not indicate their grade or gender. Therefore, totals by grade and by gender do not equal the overall total.



## ✓ Injuries, Violence, and Safety

This section deals with personal safety and violence, and includes questions about physical fights, weapons, vehicle safety, and suicide.

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- **Physical Fighting:** Physical fighting often precedes fatal and nonfatal injuries.<sup>1, 2</sup> During 1996-97, nearly 200,000 fights or physical attacks occurred at schools in the US.<sup>3</sup> More and more Vermont schools are teaching students to resolve conflicts through mediation. Nearly 60 percent of adolescents report at least one episode of dating violence.<sup>4</sup>
- **Weapons and Fear:** During adolescence, homicide rates increase substantially from 1.5 per 100,000 in youth aged 5 to 14 to 20.3 per 100,000 in youth aged 15 to 24.<sup>5</sup> Homicide is the second leading cause of death among all youth aged 15 to 24.<sup>6</sup> The immediate accessibility of a firearm or other lethal weapon is often a factor.<sup>7, 8</sup> Approximately nine out of 10 homicide victims in the United States are killed with a weapon.<sup>9</sup>
- **Vehicle Safety - Safety Belts and Bicycle Helmets:** Safety belt use is estimated to reduce motor vehicle fatalities by 45 percent and serious injury by 50 percent.<sup>10</sup> Increasing the use of automobile safety restraint systems to 85 percent could save an estimated 10,000 American lives per year.<sup>11</sup> In 1997, 74 percent of adult Vermonters reported using their safety belt, up from 55 percent in 1993.<sup>12</sup> Head injury is the leading cause of death in motorcycle and bicycle crashes.<sup>13</sup> The risk of head injury for unhelmeted bicyclists is more than six and one-half times greater than for riders who wear helmets.<sup>14</sup>
- **Vehicle Safety - Driving Under the Influence:** Motor vehicle crash injuries are the leading cause of death among youth aged 15 to 24 in the US.<sup>6</sup> In 1997, 14 out of 33 deaths (42 percent) among 15 to 24 year olds in Vermont were due to motor vehicle crashes.<sup>15</sup> Approximately 30 percent of motor vehicle crashes involve alcohol.<sup>16</sup> Alcohol-related crashes cause serious injury and permanent disability and rank as the leading cause of spinal cord injury among adolescents and young adults.<sup>17</sup>

## ✓ Injuries, Violence, and Safety (cont'd)

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- **Suicide:** Suicide is the third leading cause of death among US youth aged 15 to 24.<sup>6</sup> The suicide rate for people aged 15 to 24 has tripled since 1950.<sup>18</sup> In 1995, Vermont's suicide rate among 15 to 24 year olds was much higher than the national average with a rate of 16.5 deaths per 100,000 adolescents<sup>19</sup>, compared to 13.3 deaths per 100,000 adolescents nationwide.<sup>20</sup>

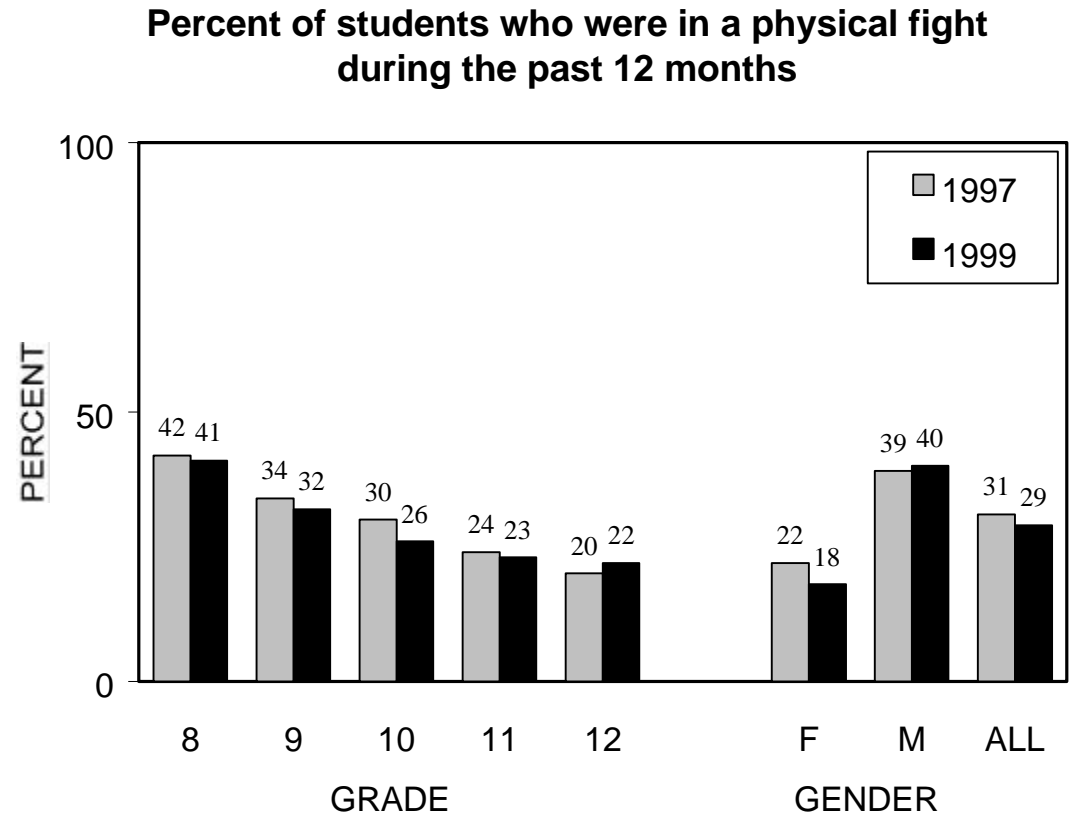
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### Related *Healthy Vermonters 2000* Goals:

- Increase the percent of people using motor vehicle safety restraints to at least 85 percent.
- Increase the number of schools that teach non-violent conflict resolution to at least 50 percent.
- Reduce suicides rate to less than 10.5 per 100,000 population.

## ■ Physical Fighting

- **Fighting is more common among young students.** In 1999, 8th graders were almost twice as likely as 12th graders to have been in a physical fight during the past year (41% vs 22%). This 8th and 12th grade difference was similar in 1997 (42% vs 20%).
- **Females fight less than males.** Male students were twice as likely as female students to have been in a physical fight (40% vs 18%). This male and female difference was similar in 1997 (39% vs 22%).

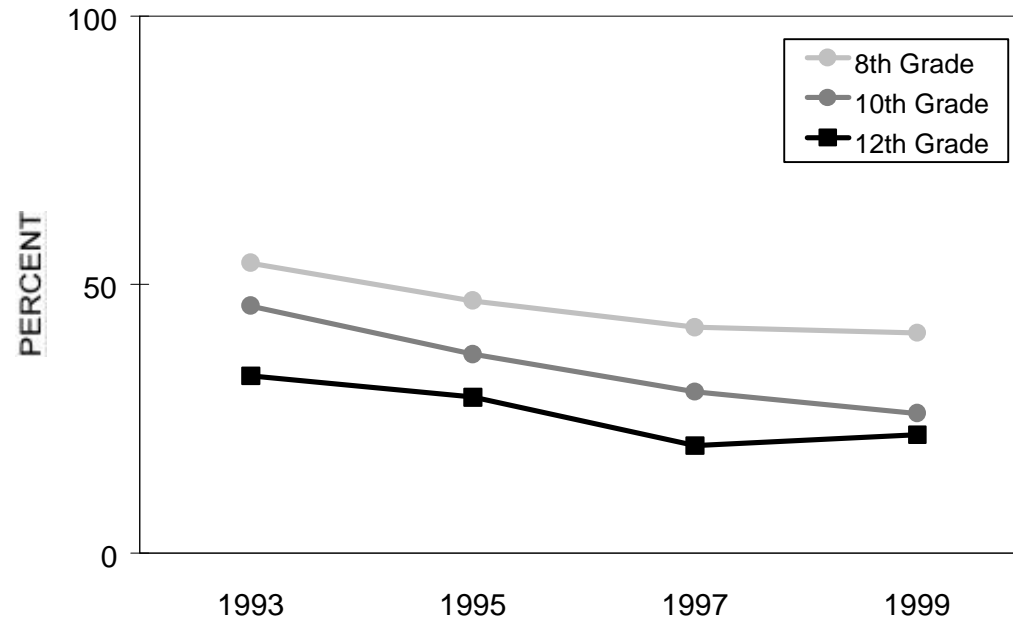


## ■ Physical Fighting

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- **Less fighting.** Physical fighting has decreased across all grades in Vermont since 1993. For example, fighting dropped from 54 to 41 percent among 8th graders, 46 to 26 percent among 10th graders, and 33 to 22 percent among 12th graders.

**Physical Fighting in Vermont 1993 to 1999**  
Percent of students who were in a physical fight during the past 12 months



## ■ Physical Fighting

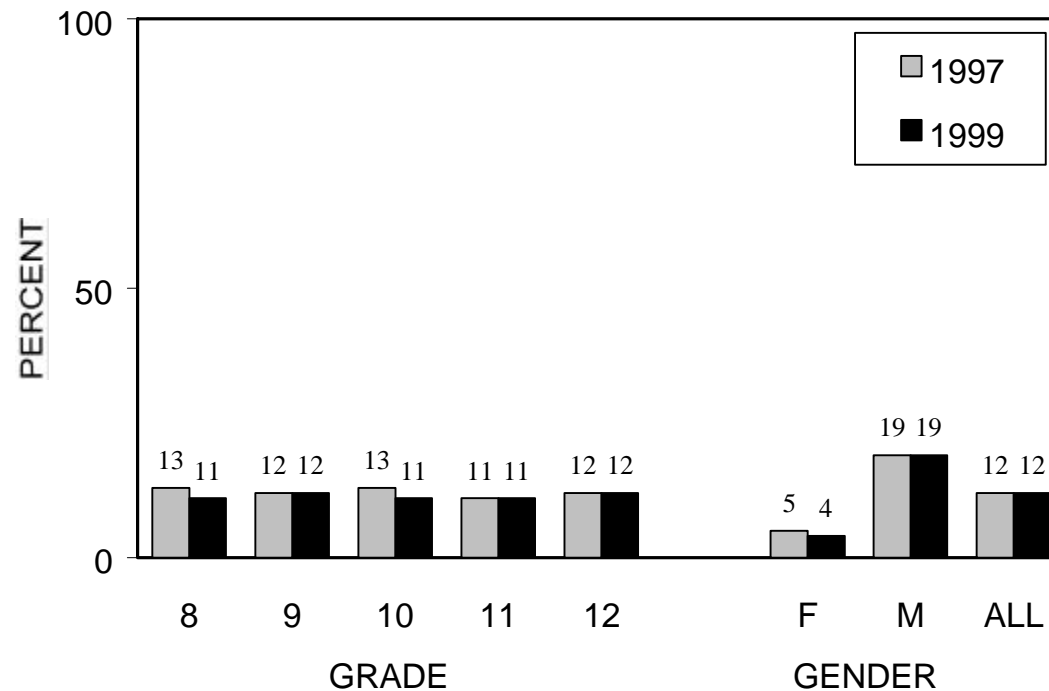
- Females are in serious fights less than males.** Female students were less likely than male students to be in a fight that resulted in an injury (3% vs 5%), and in a fight on school property (8% vs 24%). These figures are similar to the 1997 results.
- Fighting on school property is more common among young students.** Eighth graders were two and half times more likely than 12th graders to fight on school property (25% vs 10%). Overall, 16 percent of Vermont students fought on school property, similar to the 1997 overall rate (15%).
- Overall, 8 percent of students have been hit, slapped, or physically hurt by their boy/girlfriend during the past year.**

PHYSICAL FIGHTING	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who , during the past 12 months, :</b>									
<b>Were in a physical fight and had to be treated by a doctor or nurse</b>	5	4	4	3	3	3	5	4	4
<b>Were in a physical fight <u>on school property</u></b>	25	19	14	11	10	8	24	16	15
<b>Hit, slapped, or physically hurt by boy/girlfriend</b>	6	6	7	8	10	7	8	8	NA

## ■ Weapons and Fear

- **Males carry weapons to school more than females.** Male students were almost five times more likely to carry a weapon on school property than female students (19% vs 4%). This pattern is similar to the 1997 results (19% vs 5%) .

**Percent of students who carried a weapon such as a gun, knife, or club on school property during the past 30 days**



## ■ Weapons and Fear

- **Overall, 4 percent of students did not go to school because they felt unsafe.** No difference was seen between female and male students or younger and older students.
- **Males are threatened with weapons at school more than females.** Male students were more than twice as likely as female students to have been threatened with a weapon on school property (10% vs 4%).
- **More males than females have their property stolen at school.** Overall, 29 percent of male students compared to 22 percent of female students reported that someone stole or deliberately damaged their property on school property.

SAFETY, WEAPONS, AND DAMAGE TO PROPERTY									
	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who:									
Did not go to school because they felt unsafe during the past 30 days	5	5	4	3	4	4	5	4	4
Were threatened or injured with a weapon <u>on school property</u> during the past 12 months	10	9	6	6	5	4	10	8	8
Said that someone had stolen or deliberately damaged their property <u>on school property</u> during the past 12 months	31	27	24	22	21	22	29	25	32

## ■ Vehicle Safety - Safety Belts

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- **Safety belt use is up.** Overall, 77 percent of students reported always or almost always wearing their safety belt when riding in a car, compared to 75 percent in 1997, 72 percent in 1995, and 63 percent in 1993.
- **Females wear safety belts more often than males.** Four out of five (83%) female students wore their safety belt when riding in a car, compared to 72 percent of male students. The difference between females and males was similar in 1997 (80% vs 70%).

SAFETY BELT USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who wear a safety belt when riding in a car driven by someone else									
Always or almost always	76	74	79	80	78	83	72	77	75
Sometimes	11	14	11	10	10	11	12	11	12
Never or rarely	12	13	10	9	12	7	16	11	13



## ■ Vehicle Safety - Safety Belts

- **Eight out of ten of students buckle up when driving.**  
Overall, 83 percent of students reported always or almost always wearing their safety belt when driving a car.
- **Females buckle up more often than males.** Nine out of 10 (91%) female students always or almost always wore their safety belt when driving a car, compared to 77 percent of male students. This difference was similar in 1997 (89% vs 77%).

SAFETY BELT USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who wear a safety belt when driving a car</b>									
<b>Always or almost always</b>	64	82	89	85	82	91	77	83	82
<b>Sometimes</b>	8	5	4	6	7	4	7	6	6
<b>Never or rarely</b>	28	13	7	9	11	6	16	11	12

## ■ Vehicle Safety - Bicycle Helmets

- **Younger students ride bicycles more than older students.**

More 8th graders than 12th graders rode bicycles during the year preceding the survey (92% vs 68%). This difference is similar to 1997 results (92% vs 66%)

- **Bicycle helmet use is up.**  
Overall, 31 percent of students always or almost always wore helmets when riding bicycles, compared to 26 percent in 1997, 16 percent in 1995, and 11 percent in 1993.

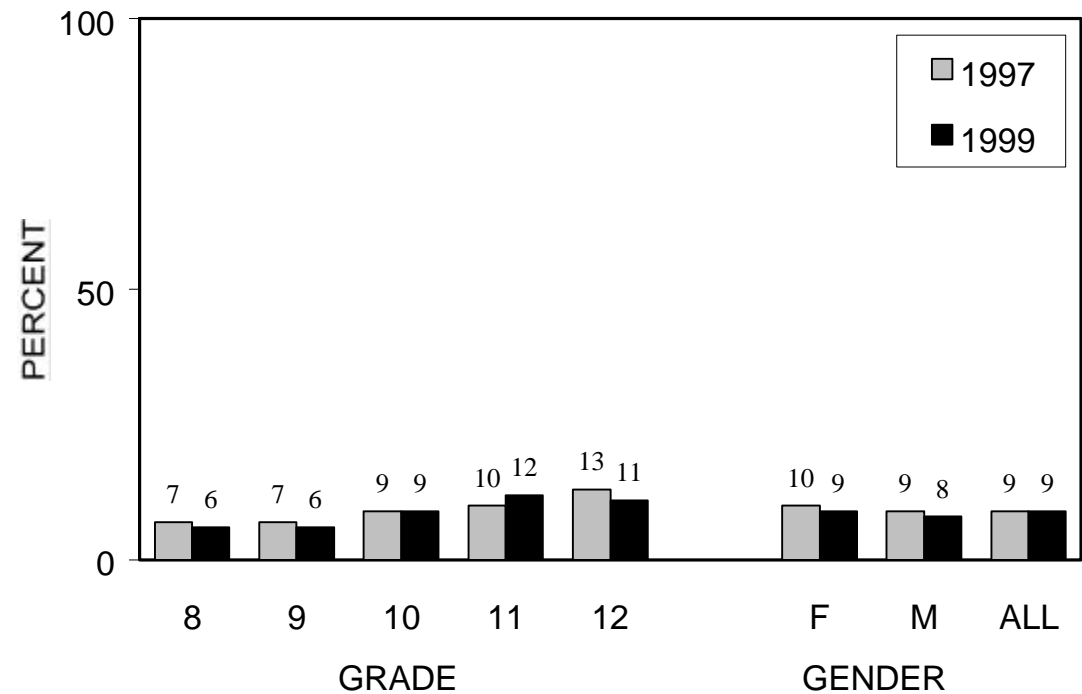
- **Younger students wear bicycle helmets more than older students.** More 8th graders than 12th graders always or almost always wore helmets when riding bicycles (38% vs 25%).

BICYCLE HELMET USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who rode a bicycle one or more times during the past 12 months</b>	92	86	81	73	68	76	86	81	81
<b>Frequency of helmet use (in percents) among students who rode a bicycle in the past 12 months</b>									
<b>Always or almost always</b>	38	34	30	26	25	32	31	31	26
<b>Sometimes</b>	15	12	11	10	10	13	11	12	12
<b>Never or rarely</b>	47	54	59	64	65	55	58	57	62

## ■ Vehicle Safety - Crashes

- Overall, 9 percent of students were injured in a car crash during the past year.
- Older students are more likely than younger students to have been injured in a car crash. Twelfth graders were almost twice as likely as 8th graders to be injured in a car crash during the past year (11% vs 6%).

Percent of students who were injured in a car or other vehicle



crash during the past 12 months

## Vehicle Safety - Crashes

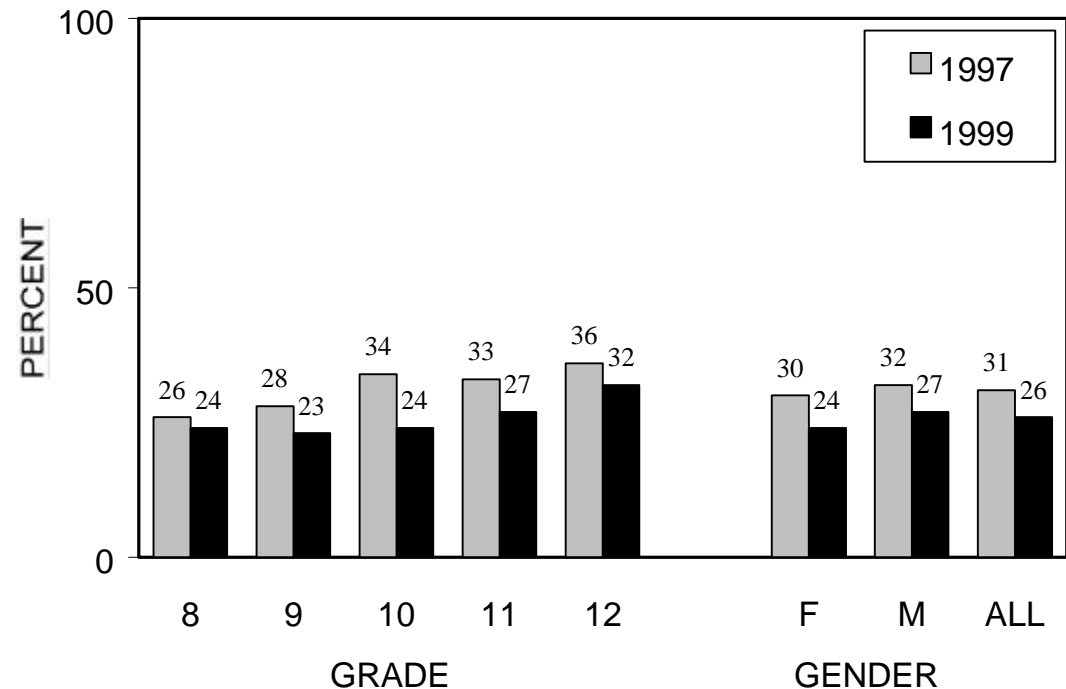
- **The majority of drivers involved in car crashes are young.** In almost half (48%) of those crashes where students were injured, the driver was 17 years old or younger.
- **More males than females who are injured in a car crash are not wearing their safety belt at the time of the crash.** More than half of male students (52%), compared to 36 percent of female students were not wearing their safety belt when injured in a car crash.

MOTOR VEHICLE CRASHES									
	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who were injured in a crash during the past 12 months, and:</b>									
<b>The driver was 17 years old or younger</b>	37	36	43	60	51	45	51	48	46
<b>They were driving</b>	29	18	16	44	49	30	37	33	28
<b>They were not wearing their safety belt</b>	57	51	40	34	45	36	52	44	42

## ■ Vehicle Safety - Driving Under the Influence

- **Riding with drinking drivers has declined slightly.** One-quarter (26%) of students reported riding with a drinking driver during the past 30 days, compared to 31 percent of students in 1997.
- **Older students ride with drinking drivers more than younger students.** Twelfth graders were more likely than 8th graders to have ridden in a car driven by someone drinking alcohol (32% vs 24%). The difference between 12th and 8th graders was similar in 1997 (36% vs 26%).

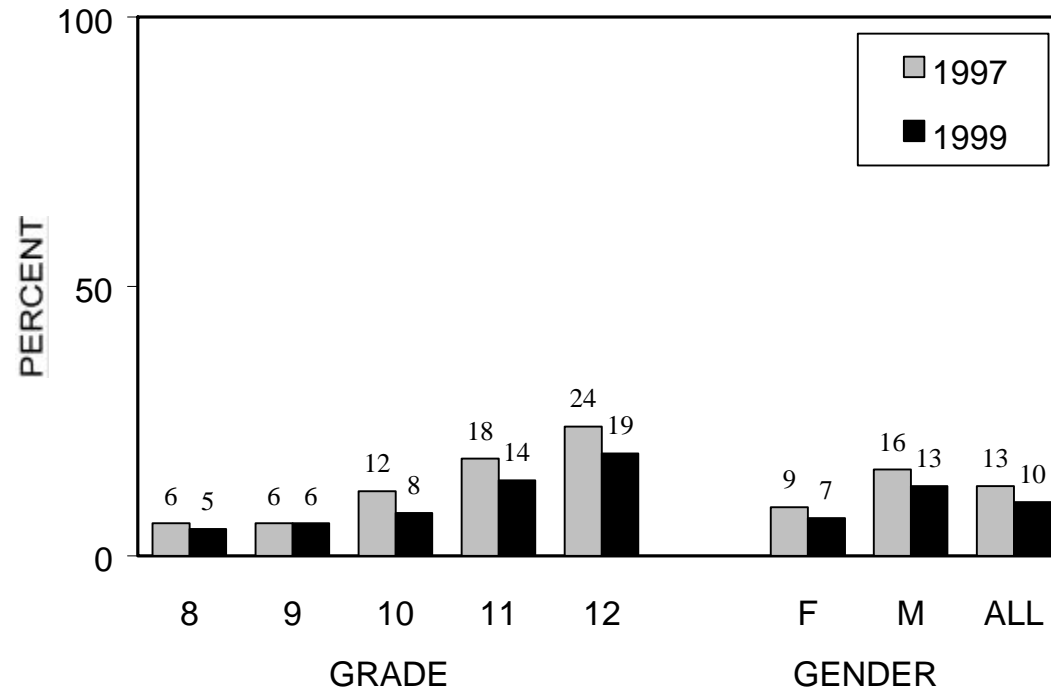
Percent of students who during the past 30 days rode in a car or other vehicle driven by someone who had been drinking alcohol



## Vehicle Safety - Driving Under the Influence

- **Females drink and drive less than males.** Female students were almost half as likely as male students to drive a car after drinking alcohol (7% vs 13%). This difference is similar to results in 1997 (9% vs 16%).
- **Older students drink and drive more than younger students.** Twelfth graders were four times more likely than 8th graders to drive when they had been drinking alcohol (19% vs 5%). This difference is similar to results in 1997 (24% vs 6%).

drove a car or other vehicle  
when they had been drinking alcohol

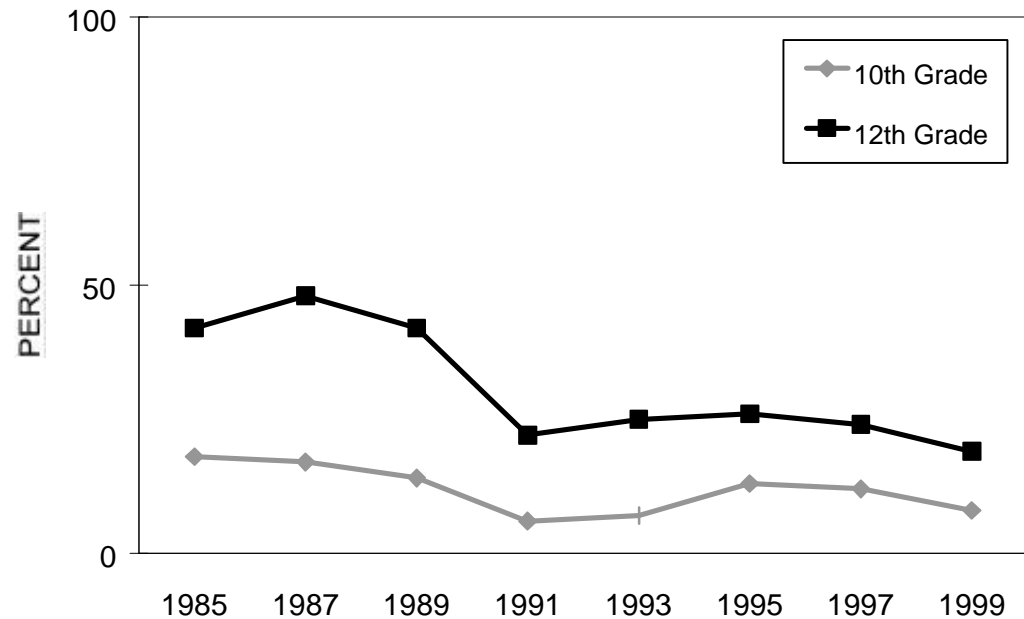


Percent of students who  
during the past 30 days

## ■ Vehicle Safety - Driving Under the Influence

- **Drinking and driving has decreased since 1985.** Among 12th graders, drinking and driving decreased from 42 percent in 1985 to 19 percent in 1999. This pattern was similar to, but less dramatic among 10th grade drivers (18% vs 8%).

**Drinking and Driving 1985 to 1999**  
Percent of students who during the past 30 days drove a car or other vehicle when they had been drinking alcohol \*

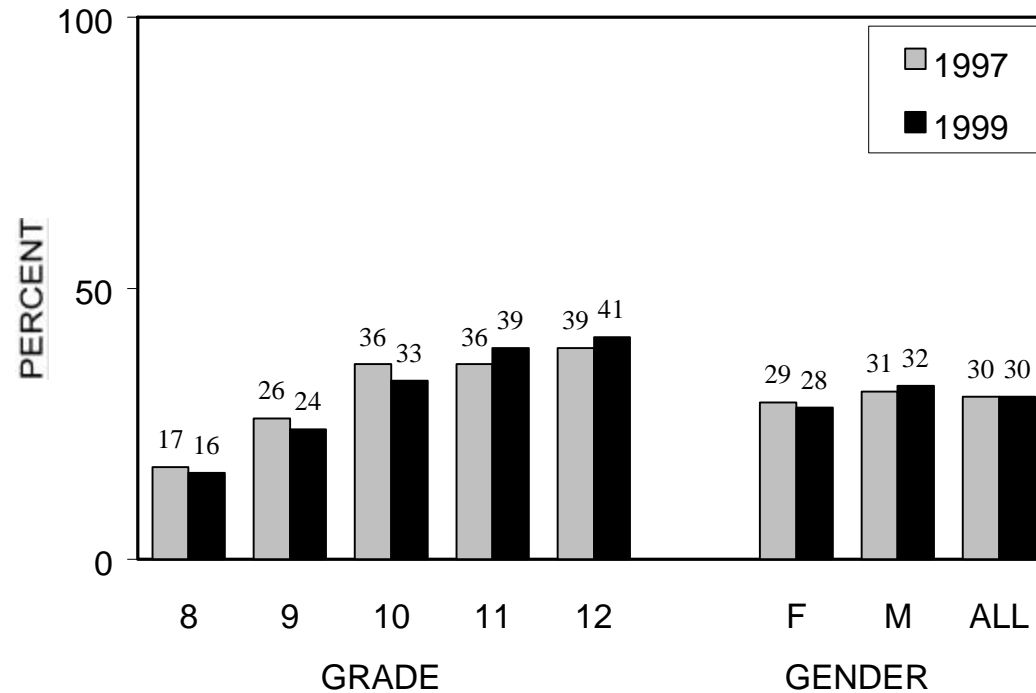


\*The data provided for 1985 to 1993 are estimates based on earlier versions of the Vermont student survey (see page 1).

## ■ Vehicle Safety - Driving Under the Influence

- Almost one-third (30%) of students have ridden with someone who was smoking marijuana.
- Older students ride with someone who has been smoking marijuana more than younger students. Twelfth graders were more likely than 8th graders to have ridden in a car driven by someone smoking marijuana (41% vs 16%).

Percent of students who during the past 30 days rode in a car or other vehicle driven by someone who had been smoking marijuana

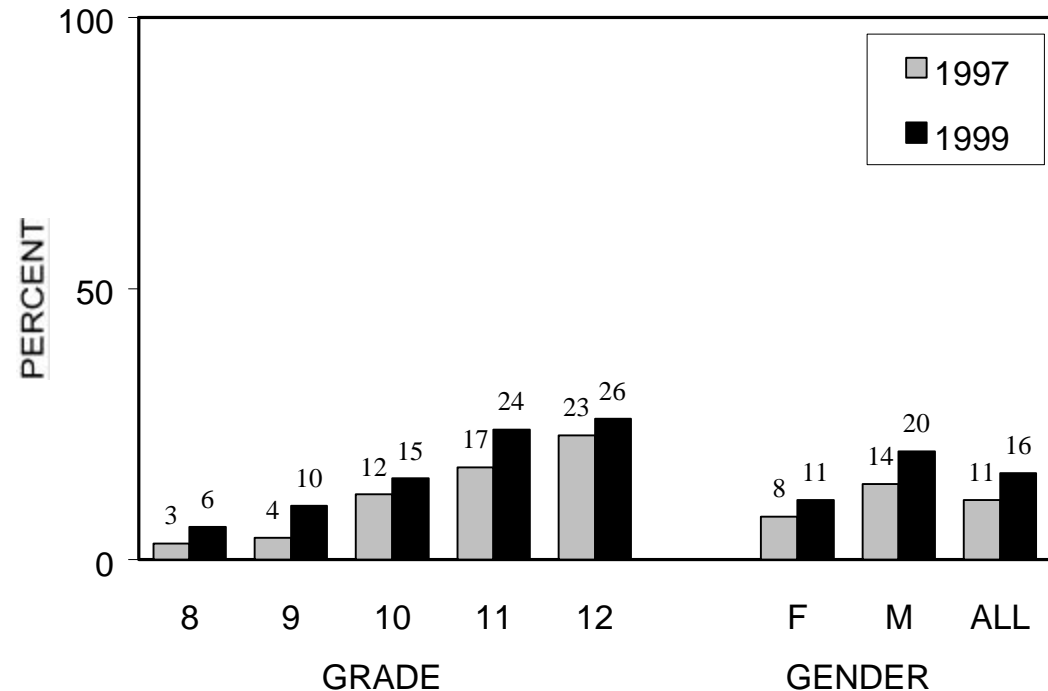




## ■ Vehicle Safety - Driving Under the Influence

- **Female students drive when they have been smoking marijuana less than male students.** Females were almost half as likely as males to report driving when they had been smoking marijuana (11% vs 20%).
- **Older students drive when they have been smoking marijuana more than younger students.** Twelfth graders were over four times more likely than 8th graders to drive when they had been smoking marijuana (26% vs 6%).

Percent of students who during the past 30 days drove a car or other vehicle when they had been



smoking marijuana

## ■ Suicide

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- Overall, 16 percent of students made a suicide plan during the past 30 days.
- More females than males consider suicide. Female students were more likely than male students to make a suicide plan (19% vs 13%) and actually attempt suicide (9% vs 5%). The difference between females and males is similar to results from 1997.

SUICIDE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who during the past 12 months:									
Made a plan about how to attempt suicide	17	16	15	14	15	19	13	16	18
Actually attempted suicide	8	8	6	6	5	9	5	7	9
Attempted suicide and required medical treatment	3	3	2	2	2	2	2	2	3

## ✓ Alcohol, Tobacco, and Other Drugs

The questions in this section ask students about their use of alcohol, tobacco products, marijuana, inhalants, cocaine, steroids, heroin, hallucinogens, and methamphetamines. The questions ask the age at which students first used alcohol, cigarettes, marijuana, cocaine, and inhalants and how often they use them now.

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- **Alcohol Use** is a major contributing factor in approximately one half of all homicides and suicides,<sup>21</sup> and approximately 30 percent of motor vehicle crashes,<sup>16</sup> which are the leading causes of death and disability among young people in the United States.<sup>21</sup> Approximately 100,000 American deaths per year are attributable to misuse of alcohol.<sup>22</sup> Heavy drinking among youth has been linked to physical fights, property destruction, academic and job problems, and trouble with law enforcement authorities.<sup>11</sup>
- **Tobacco Use** is the single most preventable cause of death in the United States,<sup>23</sup> accounting for more than one of every five deaths.<sup>24</sup> Smoking causes heart disease; cancers of the lung, larynx, mouth, esophagus, and bladder; stroke; and chronic obstructive pulmonary disease.<sup>23</sup> In addition, smoking is related to poor academic performance and the use of alcohol and other drugs.<sup>25</sup> Between 1970 and 1986, the prevalence of snuff use in the US increased fifteenfold among men 17 to 19, and the prevalence of chewing tobacco use increased fourfold.<sup>23</sup> Cigar smoking has become increasingly common among young people. In fact, the prevalence of cigar use in 1997 among US high school students was 31 percent among males and 11 percent among females.<sup>26</sup> Cigar smoking has been associated with cancers of the oral cavity, larynx, esophagus, and lung and with chronic obstructive lung disease.<sup>27</sup>
- **Marijuana Use** has begun to rebound during the past few years following a decade of decline. Increased use has occurred across all ages but is especially true among 8th graders. Chronic, long-term use is associated with smoking-related respiratory damage, short-term memory loss, decreased motivation, and psychological dependence.<sup>28</sup>
- **Inhalant Use** is the deliberate inhalation or sniffing of common products found in homes and schools, like glue and cleaners, and some gases intended for medical or dental purposes to obtain a “high”. Inhalant use can cause short-term memory loss, brain, lung, liver, and kidney damage, or even sudden death. Inhalants are legal, easy to get, inexpensive and difficult to detect, and experimentation typically begins in the preteen years.<sup>29</sup>

## ✓ Alcohol, Tobacco, and Other Drugs (cont'd)

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- **Other Drug Use** is related to suicide, early unwanted pregnancy, school failure, delinquency, and transmission of sexually transmitted diseases (STD), including HIV infection.<sup>30,31</sup> One in four American adolescents is estimated to be at very high risk for the consequences of alcohol and other drug problems.<sup>22</sup> In spite of improvements in recent years, illicit drug use is greater among high school students and other young adults in the United States than in any other industrialized nation in the world.<sup>32</sup>
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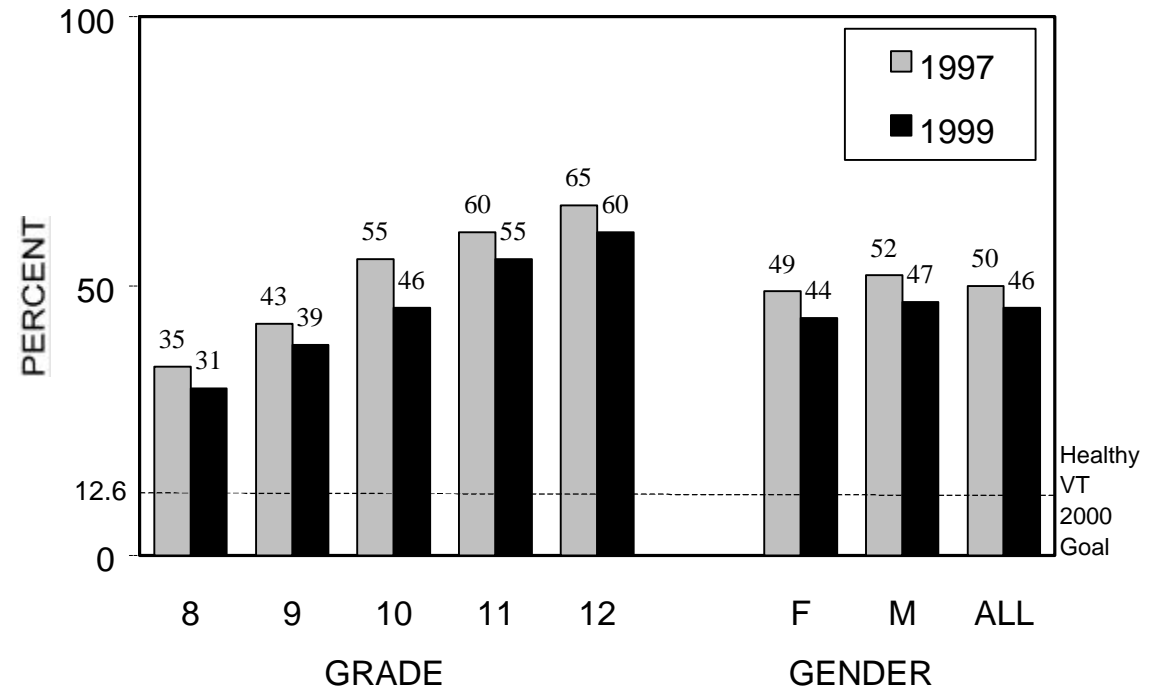
### **Related *Healthy Vermonters 2000* Goals:**

- Reduce percent of youth aged 12 to 17 who used alcohol in the past month to 12.6 percent or less.
- Reduce percent of high school seniors who engage in heavy drinking to 28 percent or less.
- Reduce percent of youth who begin smoking by age 20 to 15 percent or less.
- Reduce percent of youth aged 12 to 17 who used marijuana in the past month to 3.2 percent or less.
- Reduce percent of youth aged 12 to 17 who used cocaine in the past month to 0.6 percent or less.

## ■ Alcohol Use

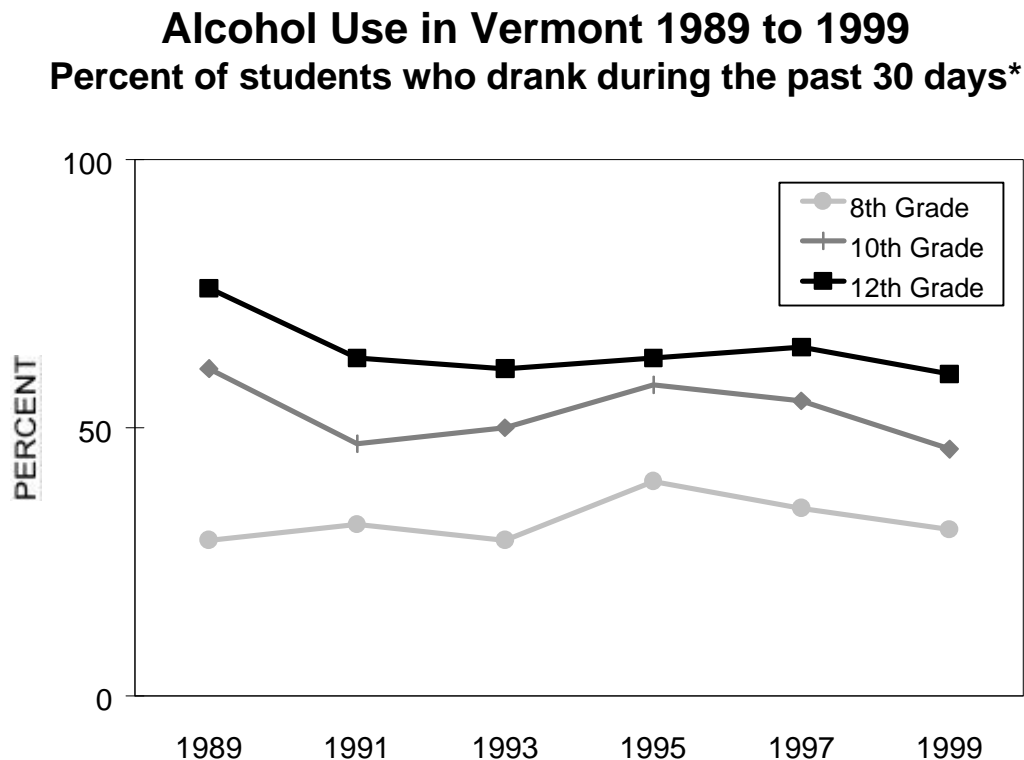
- **Less than half of all students have consumed alcohol during the past 30 days.** Overall, 46 percent of students drank alcohol, compared to 50 percent of students in 1997.
- **Alcohol use increases across grades.** More 12th graders than 8th graders drank alcohol (60% vs 31%). In 1997, 65 percent of 12th graders drank alcohol, compared to 35 percent of 8th graders.

**Percent of students who consumed at least one drink of alcohol during the past 30 days**



## ■ Alcohol Use

- **Alcohol use among 10th and 12th graders has decreased since 1989.** Alcohol use among 12th graders dropped from 76 percent in 1989 to 63 percent in 1991 and has been level since then. Alcohol use among 10th graders dropped from 61 percent in 1989 to 47 percent in 1991, and is now 46 percent.
- **Alcohol use among 8th graders has decreased since 1995.** From 1993 to 1995 alcohol use among 8th graders increased from 29 to 40 percent and then dropped to 31 percent in 1999.

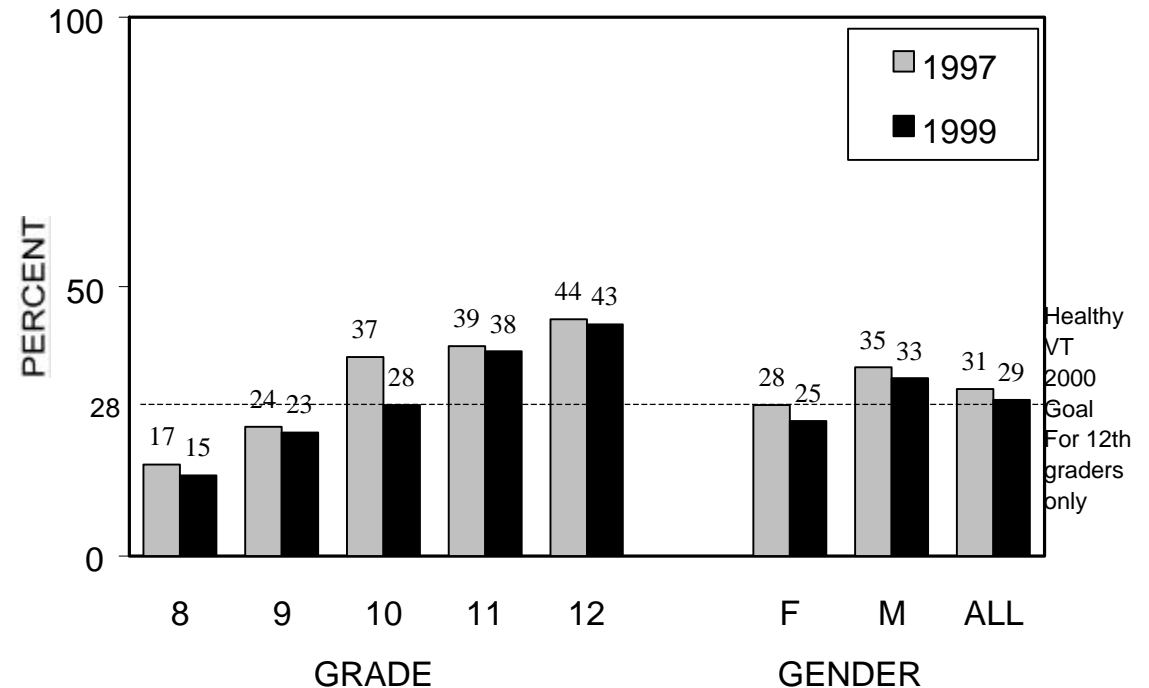


\*The data provided for 1989 to 1991 are estimates based on earlier versions of the Vermont student survey (see page 1).

## ■ Alcohol Use

- **Three out of ten students binge drink.** Binge drinking is defined as having five or more drinks of alcohol within a couple of hours. Overall, 29 percent of students reported binge drinking during the past 30 days.
- **Female students binge drink less than male students.** One-fourth (25%) of female students reported binge drinking compared to 33 percent of male students. The difference between females and males was similar in 1997 (28% vs 35%)
- **Older students binge drink more than younger students.** Twelfth graders were over twice as likely as 8th graders to binge drink (43% vs 15%). The difference between 12th and 8th graders was similar in 1997 (44% vs 17%).

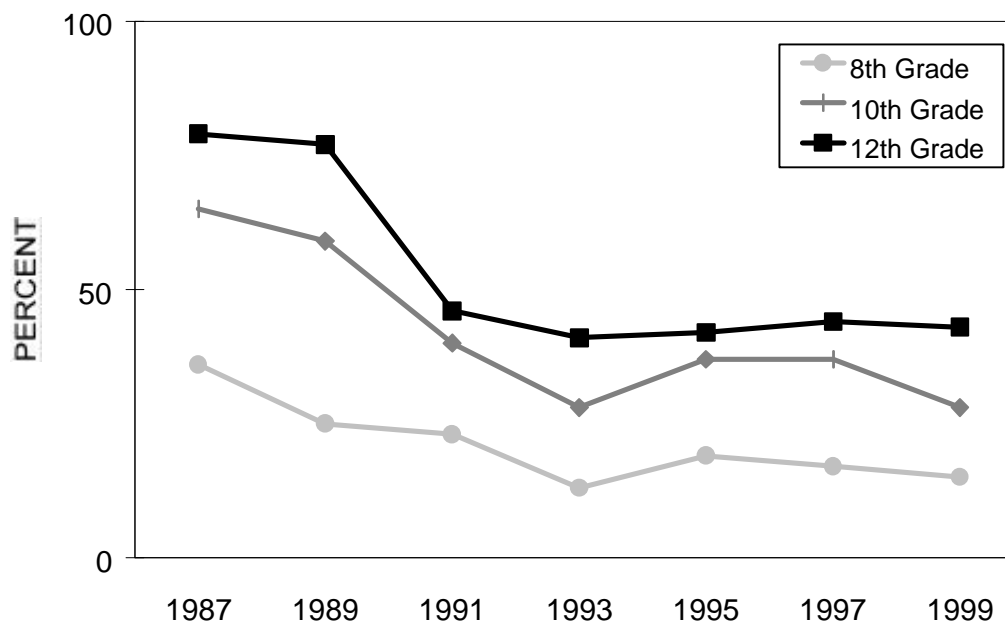
**Percent of students who binged on alcohol (had five or more drinks of alcohol within a couple of hours) during the past 30 days**



## ■ Alcohol Use

- **Binge drinking is decreasing.**  
Among 8th graders binge drinking decreased from 36 percent in 1987 to 15 percent in 1999. Among 10th graders, binge drinking decreased from 65 percent in 1987 to 28 percent in 1999. Among 12th graders, binge drinking decreased from 79 percent in 1987 to 43 percent in 1999.

**Alcohol Use in Vermont 1987 to 1999**  
**Percent of students who “binged” during the past 30 days\***



\*The data provided for 1987 to 1991 are estimates based on earlier versions of the Vermont student survey (see page 1).



## ■ Alcohol Use

- **Seven out of ten students have had a drink of alcohol.** In 1999, 72 percent of students had consumed alcohol, other than a few sips.
- **Females start drinking alcohol later than males.** Female students were less likely than male students to report consuming alcohol before age 13 (24% vs 34%). The difference between females and males was similar in 1997 (30% vs 40%).
- **Females drink less frequently than males.** Female students were half as likely as male students to have consumed alcohol on 10 or more days during the past month (5% vs 10%). The difference between females and males was similar in 1997 (6% vs 11%).

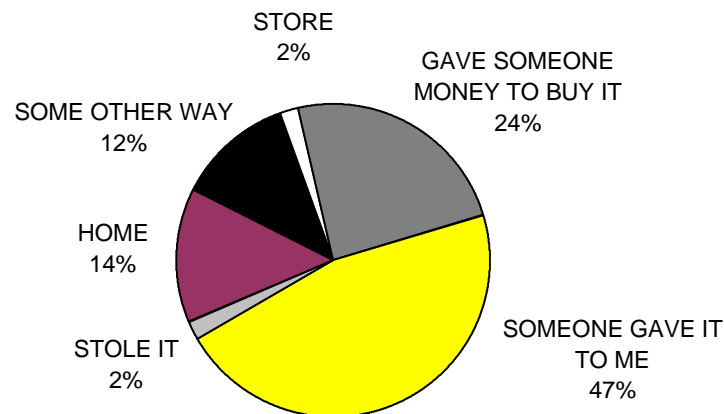
ALCOHOL USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who:</b>									
<b>Have ever had a drink of alcohol, other than a few sips</b>	55	66	77	82	86	71	74	72	74
<b>First consumed alcohol, other than a few sips, before 13 years of age</b>	38	33	27	24	20	24	34	29	35
<b>Drank alcohol on 3 to 9 days during the past 30 days</b>	10	15	19	25	28	18	20	19	21
<b>Drank alcohol on 10 or more days during the past 30 days</b>	5	6	7	9	11	5	10	8	9
<b>“Binged” on alcohol 10 or more days during the past 30 days</b>	2	2	3	3	5	1	5	3	3
<b>Drank alcohol <u>on school property</u> during the past 30 days</b>	4	6	4	4	6	3	7	5	6

## ■ Alcohol Use

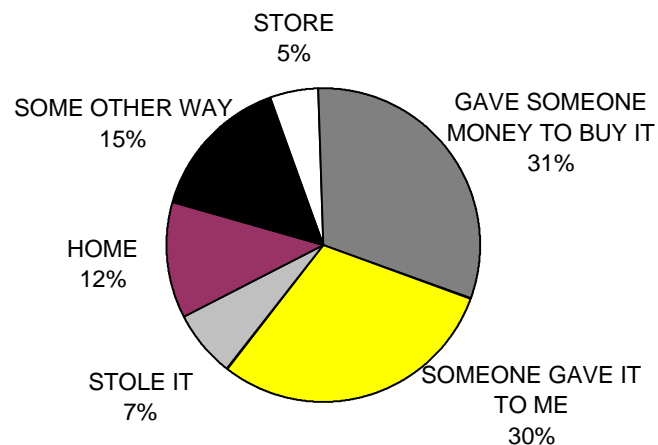
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- **Most students obtain alcohol by someone giving it to them or by giving someone money to buy it for them.** Overall, 38 percent of the students who drank during the past 30 days reported someone gave them alcohol and 27 percent reported giving someone else money to buy alcohol for them.
- **Some students obtain alcohol from home.** Among students who drank alcohol during the past 30 days, 13 percent got their alcohol from home.

**Where students get their own alcohol**  
(only among students who drank during the past 30 days)  
**FEMALES**



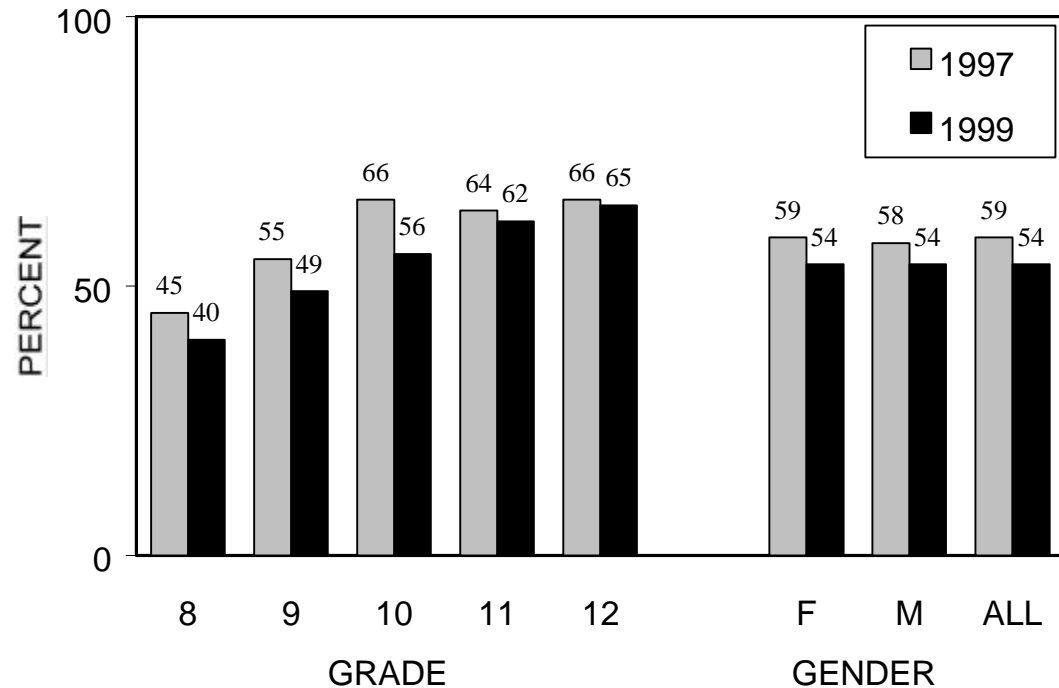
**MALES**



## ■ Tobacco Use

- **More than half of students have smoked a whole cigarette.**  
In 1999, 54 percent of students had ever smoked a whole cigarette.
- **More older students than younger students have smoked.**  
In 1999, 65 percent of 12th graders compared to 40 percent of 8th graders have ever smoked a whole cigarette. This difference was similar in 1997 (66% vs 45%).

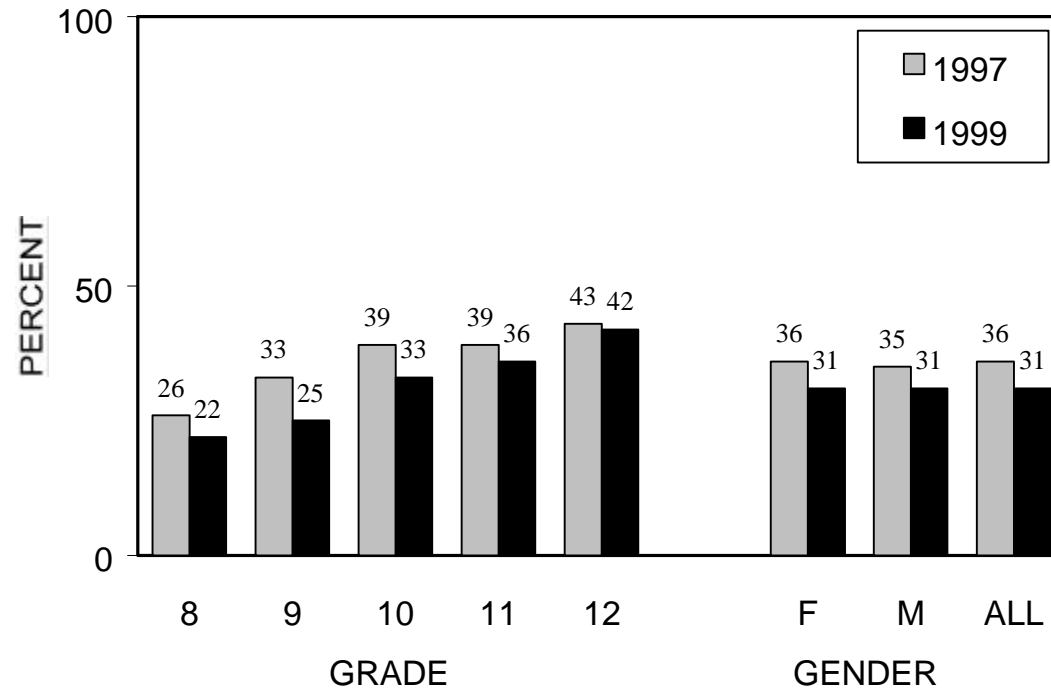
Percent of students who have ever smoked a whole cigarette



## ■ Tobacco Use

- **Almost one-third of Vermont students smoke.** Overall, 31 percent of students reported smoking at least once during the past 30 days.
- **Over one-fifth of 8th graders smoke.** In 1999, 22 percent of 8th graders smoked cigarettes during the past 30 days.

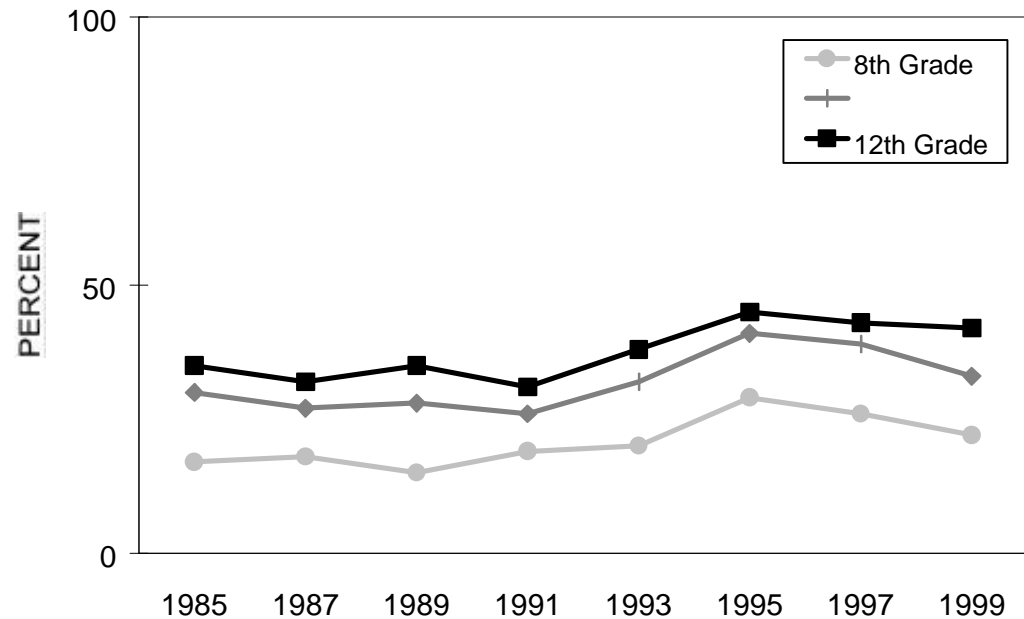
Percent of students who smoked cigarettes on one or more days during the past 30 days



## ■ Tobacco Use

- **Cigarette smoking is down since 1995 among younger students.** Smoking during the past 30 days increased from 1991 to 1995 and is now declining. This is especially true across 8th and 10th grades. From 1995 to 1999 cigarette use decreased from 41 to 33 percent among 10th graders and 29 to 22 percent among 8th graders.

**Cigarette Smoking in Vermont 1985 to 1999**  
Percent of students who smoked cigarettes during the last 30 days\*

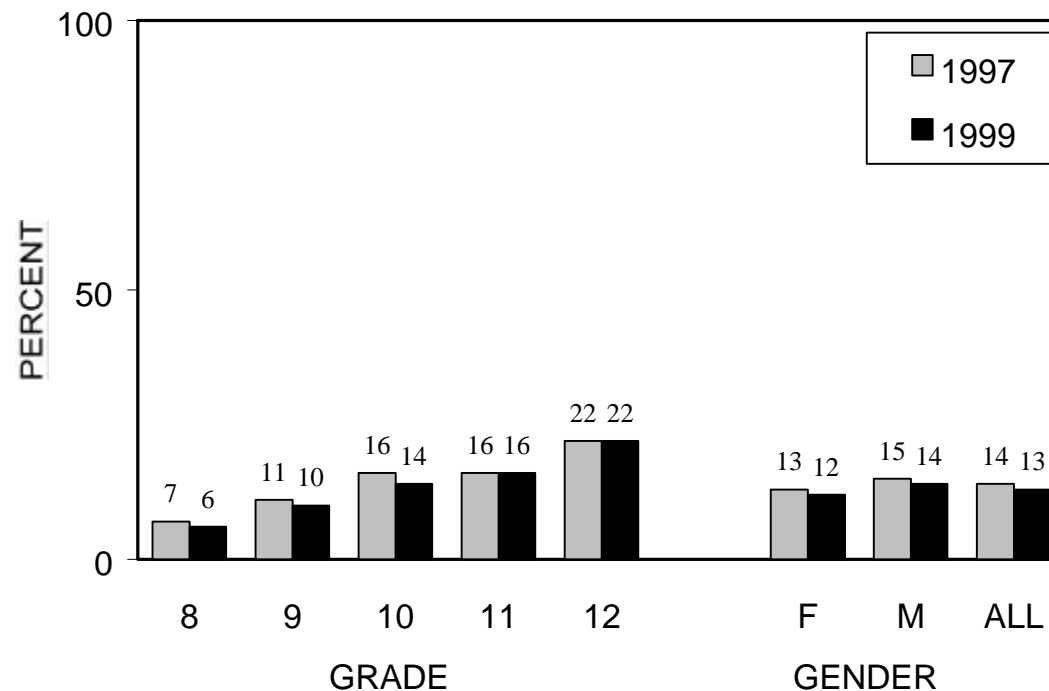


\*The data provided for 1985 to 1991 are estimates based on earlier versions of the Vermont student survey (see page 1).

## ■ Tobacco Use

- **Overall, 13 percent of Vermont students smoke regularly.** Regular smoking among students has not significantly changed since 1997.
- **More older students than younger students are regular smokers.** In 1999, 22 percent of 12th graders smoked every day, compared to only 6 percent of 8th graders. This difference is similar to results in 1997 (22% vs 7%).

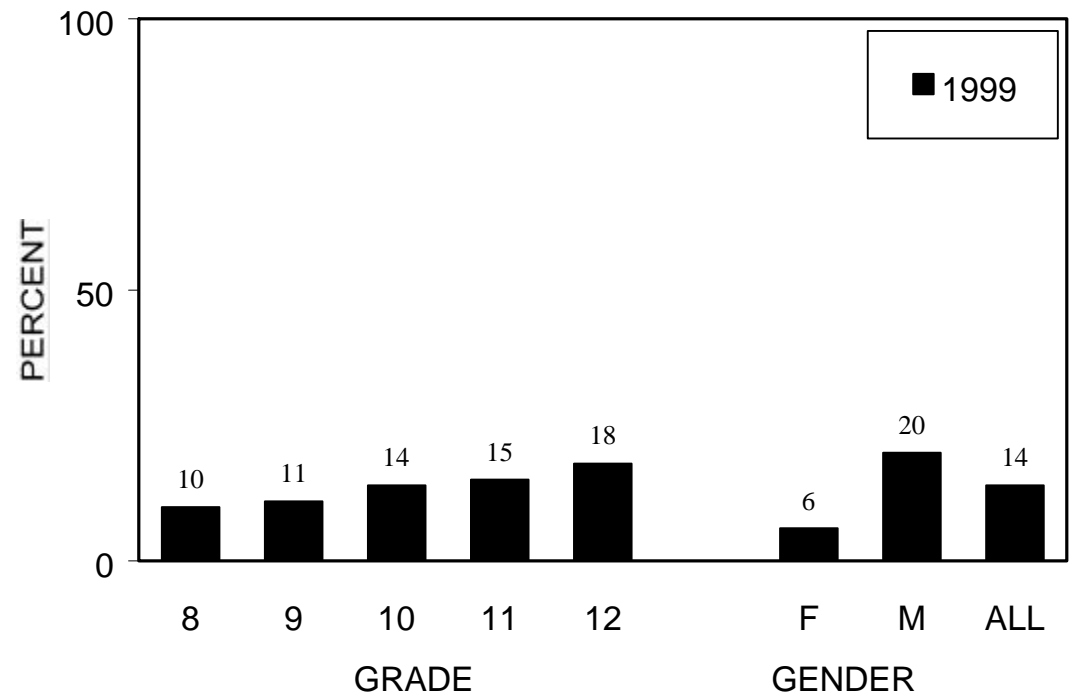
Percent of students who smoked cigarettes every day during the past 30 days



## ■ Tobacco Use

- Overall, 14 percent of students smoked cigars during the past 30 days.
- **More males smoke cigars than females.** In 1999, 20 percent of males compared to 6 percent of females smoked cigars during the past 30 days.

Percent of students who smoked cigars, cigarillos, or little cigars on one or more days during the past 30 days



## ■ Tobacco Use

- **Over one-fourth of Vermont students start smoking prior to age 13.** Overall, 28 percent of students reported smoking a whole cigarette prior to age 13.
- **Overall, 12 percent of students smoke cigarettes on school property.**
- **Over one-fourth of students have tried to quit smoking.** Overall, 28 percent of students reported trying to quit smoking at some point during the past.
- **More males than females chew tobacco.** Male students were four times more likely than female students to chew tobacco (12% vs 3%).

TOBACCO USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who:</b>									
<b>Smoked a whole cigarette prior to age 13</b>	31	30	27	25	22	24	30	28	28
<b>Smoked more than 10 cigarettes on days smoked during the past 30 days</b>	2	4	6	7	10	4	7	6	7
<b>Smoked more than a pack on days smoked during the past 30 days</b>	1	2	1	2	3	1	3	2	2
<b>Smoked cigarettes <u>on school property</u> during the past 30 days</b>	7	12	14	14	16	10	14	12	16
<b>Ever tried to quit smoking cigarettes</b>	21	24	28	32	33	28	27	28	33
<b>Used chewing tobacco or snuff during the past 30 days</b>	5	7	8	9	8	3	12	8	7

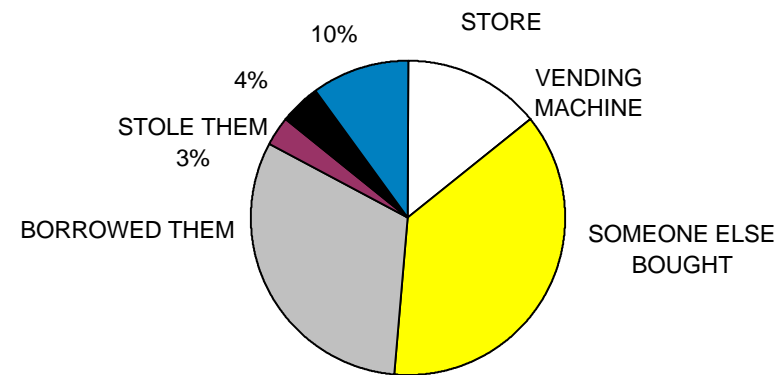


## ■ Tobacco Use

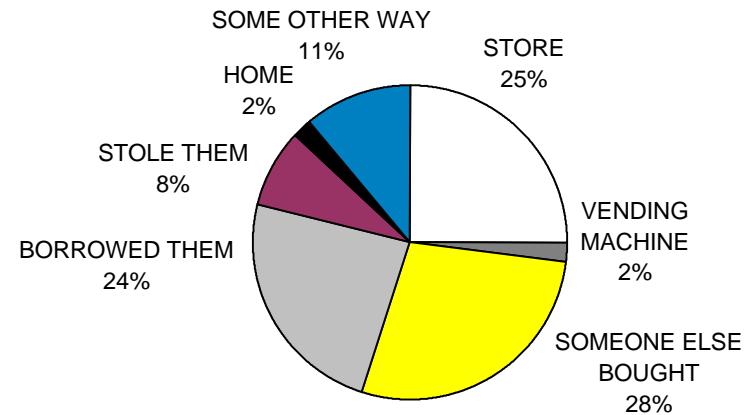
- **Females buy cigarettes in stores less often than males.** Among students who smoked during the past 30 days, 14 percent of females bought cigarettes in stores, compared to 25 percent of males.
- **Most students obtain cigarettes from other people.** Overall, most students who smoked had someone else buy cigarettes for them (32%) or borrowed (28%) the cigarettes.

**Where students get cigarettes**  
(only among students who smoked during the past 30 days)

### FEMALES



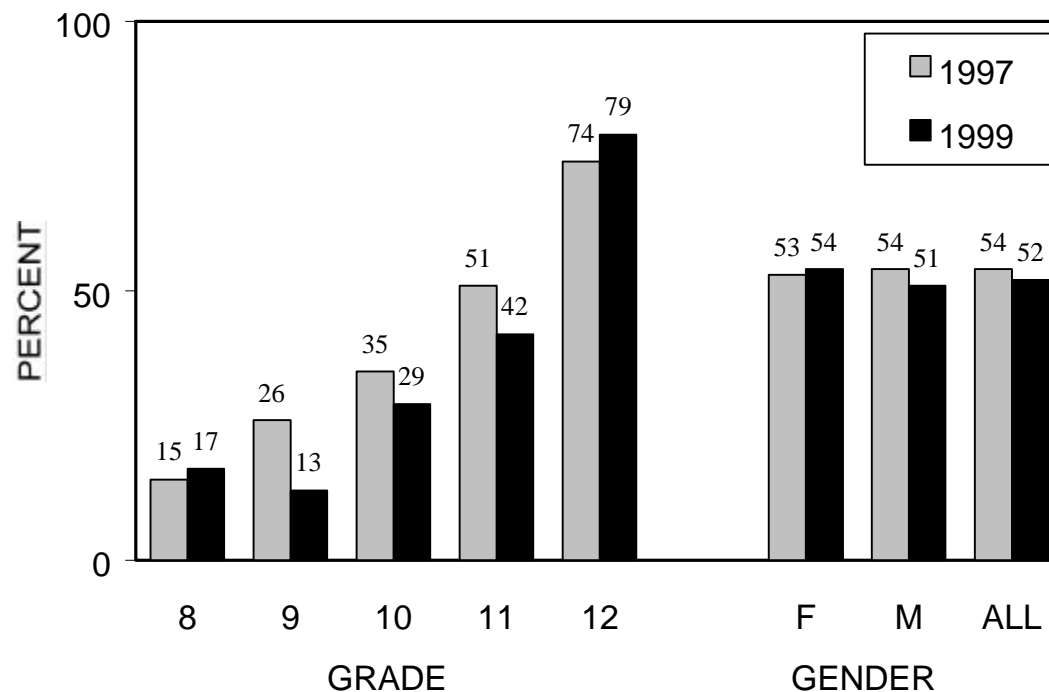
### MALES



## ■ Tobacco Use

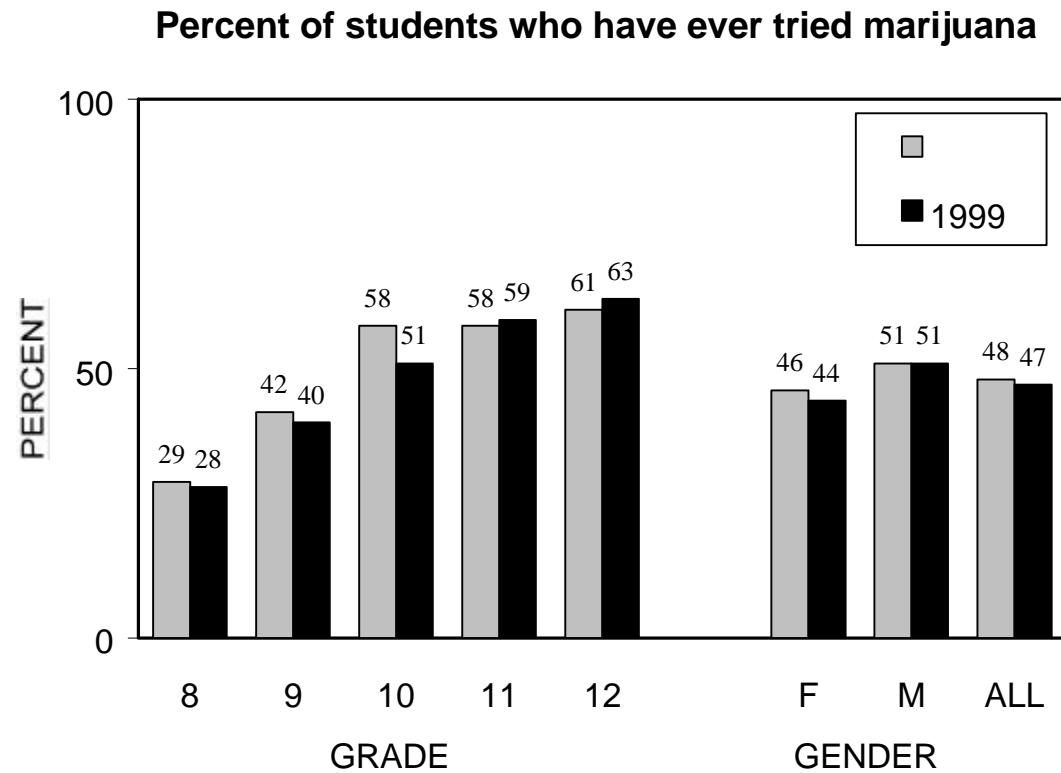
- **Half of students were asked to show ID.** Overall, 52 percent of students who bought cigarettes in a store were asked to show identification.
- **Eighth graders were asked to show ID less than 12th graders.** Only 17 percent of 8th graders who bought cigarettes in a store were asked to show identification, compared to 79 percent of 12th graders.

**The percent of students who were asked to show proof of age when buying cigarettes in a store**  
(only among those students who bought cigarettes)



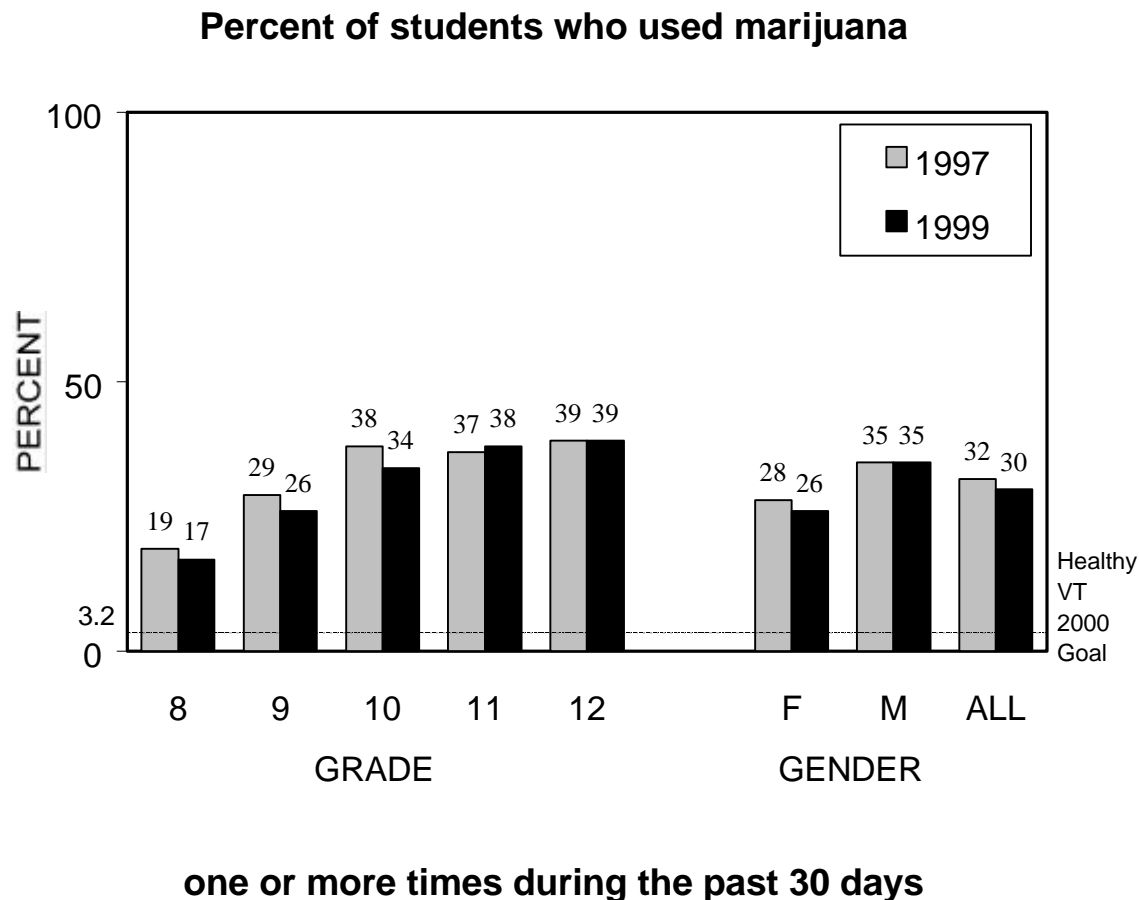
## ■ Marijuana Use

- **Almost half of students have tried marijuana.** Overall, 47 percent of students had tried marijuana.



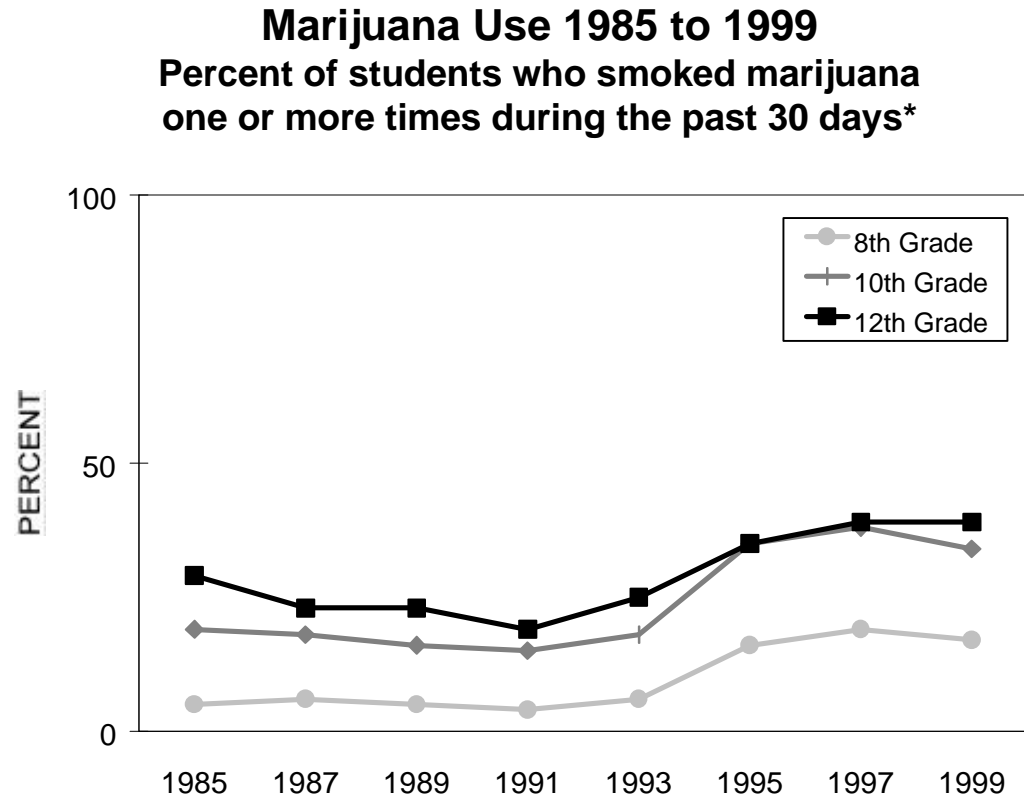
## ■ Marijuana Use

- **Almost one-third of Vermont students use marijuana.** Overall, 30 percent of students used marijuana during the past 30 days
- **Females use marijuana less than males.** One-fourth (26%) of female students used marijuana, compared to 35 percent of male students. The difference between females and males is similar to results in 1997.



## ■ Marijuana Use

- **Marijuana use has increased since 1985.** The percentage of students who used marijuana during the past 30 days was level or even slightly declining from 1985 to 1991. Since 1991, marijuana use has increased dramatically among 12th graders (19% to 39%), 10th graders (15% to 34%), and 8th graders (4% to 17%).



\*The data provided for 1985 to 1991 are estimates based on earlier versions of the Vermont student survey (see page 1).

## ■ Marijuana Use

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- **Students start using marijuana earlier compared to 1993.**

Overall, 15 percent of students have smoked marijuana by age 13, compared to 13 percent in 1997, 10 percent in 1995 and 6 percent in 1993.

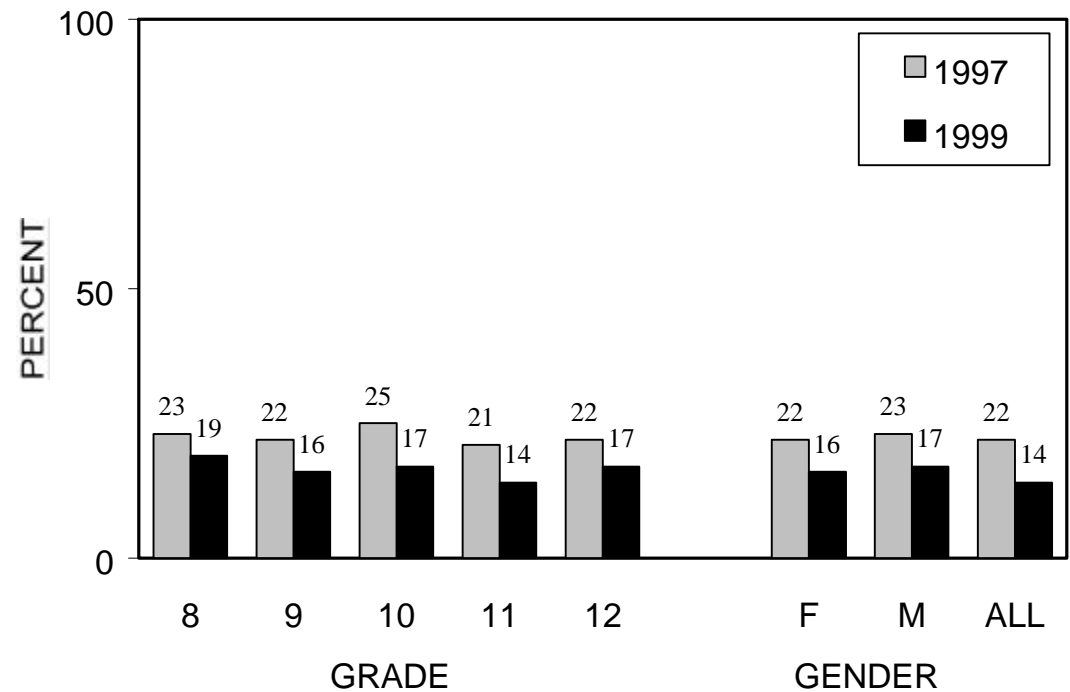
- **Males start using marijuana earlier and use marijuana more often than females.** In 1999, 19 percent of male students used marijuana by age 13, compared to 10 percent of females. Similarly, 19 percent of male students, compared to 10 percent of female students, used marijuana 10 or more times during the past 30 days.

MARIJUANA USE	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who:									
Tried marijuana before age 13	16	16	16	14	11	10	19	15	13
Used marijuana 10 or more times during the past 30 days	7	12	15	19	20	10	19	14	14
Used marijuana one or more times <u>on school property</u>	5	11	10	10	10	5	13	9	9

## ■ Inhalant Use

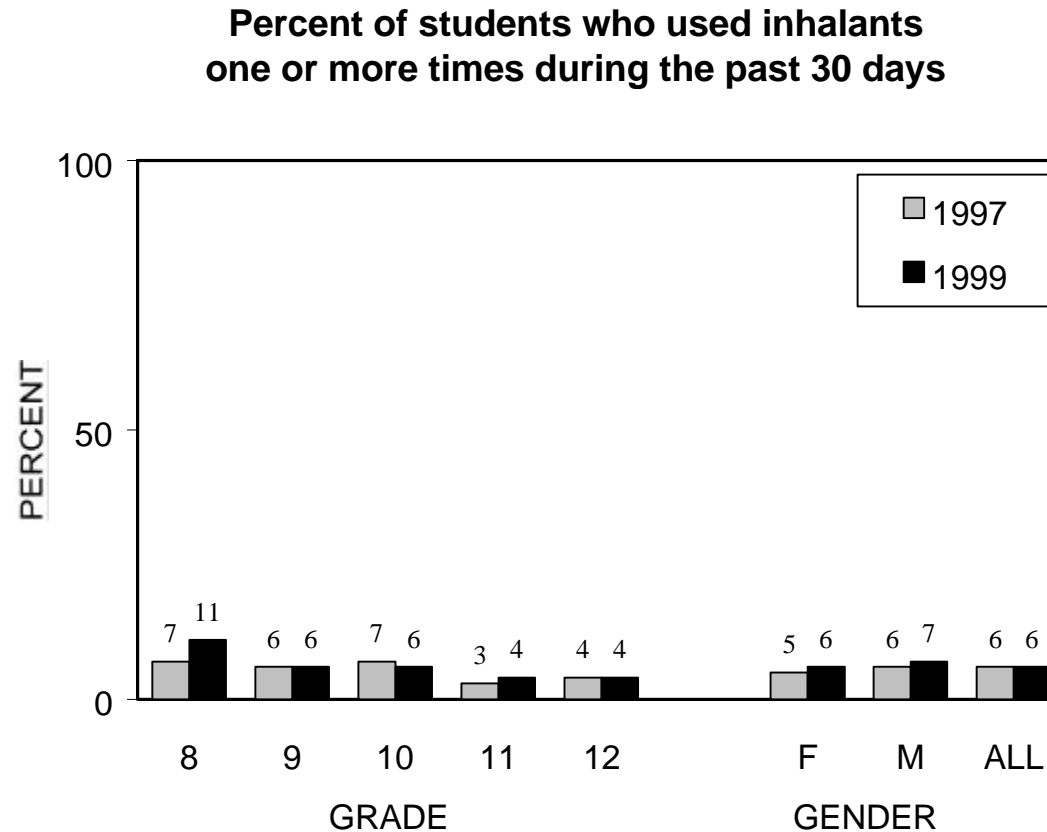
- **Inhalant use is down.** Overall, 14 percent of students tried inhalants, compared to 22 percent in 1997 and 27 percent in 1995.

**Percent of students who have ever used inhalants (e.g., sniffed glue, breathed the contents of aerosol spray cans, inhaled any paints or sprays to get high)**



## ■ Inhalant Use

- Overall, 6 percent used inhalants during the past 30 days. Similarly, 6 percent of students used inhalants in 1997.
- More younger students than older students use inhalants. Eighth graders were almost three times more likely than 12th graders to have used inhalants during the past 30 days.



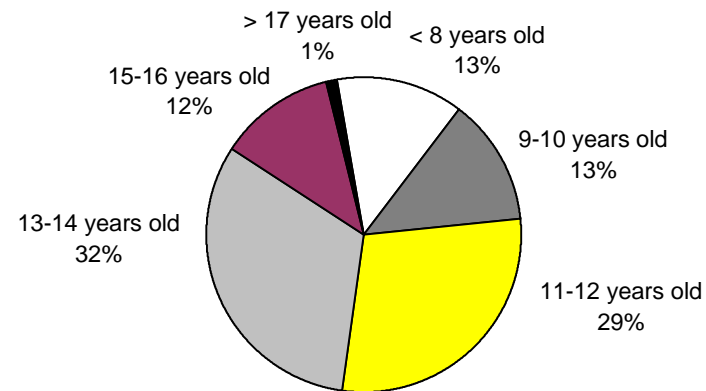


## ■ Inhalant Use

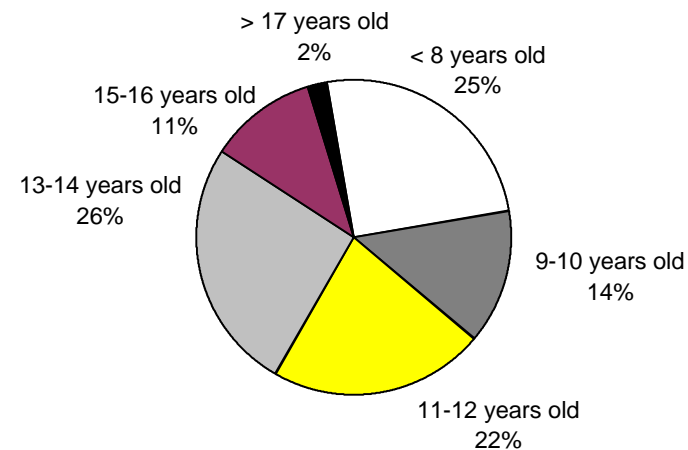
- **Over half of students who have used inhalants try them prior to age 13.** Overall, 58 percent of students who used inhalants first tried them when they were 12 years old or younger.
- **Males try inhalants earlier than females.** Over one-third (39%) of male students who have used inhalants tried them prior to age 11, compared to 26 percent of female students.

**Age at which students first tried inhalants  
(only among students who have ever used inhalants)**

### FEMALES



### MALES



## ■ Other Drug Use

- **Overall, 9 percent of Vermont students have used cocaine.** In 1997, 10 percent of students had used cocaine during their lifetime.
- **Females use illegal drugs less than males.** Female students were less likely than male students to have taken steroids (4% vs 6%); to have used heroin (2% vs 6%); to have used methamphetamines (8% vs 11%); to have used hallucinogens (16% vs 23%); to have injected illegal drugs (2% vs 5%); and to have been offered or sold drugs on school property (22% vs 34%).

	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who have used cocaine:</b>									
<b>During their lifetime</b>	6	8	9	10	11	7	10	9	10
<b>Prior to age 13</b>	3	3	2	2	2	1	4	2	NA
<b>During the past 30 days</b>	4	5	5	5	5	3	7	5	5
<b>Percent of students who during their lifetime have:</b>									
<b>Taken steroids without a prescription</b>	5	5	5	5	6	4	6	5	6
<b>Used heroin</b>	3	4	4	4	4	2	6	4	NA
<b>Used methamphetamines</b>	7	9	9	11	12	8	11	10	NA
<b>Used hallucinogens</b>	10	15	20	26	29	16	23	20	NA
<b>Used a needle to inject any illegal drug into their body</b>	4	4	4	3	4	2	5	4	4
<b>Percent of students who were offered, sold, or given an illegal drug <u>on school property</u> during the past 12 months</b>	18	28	33	31	30	22	34	28	35

OTHER DRUG USE

GRADE

GENDER

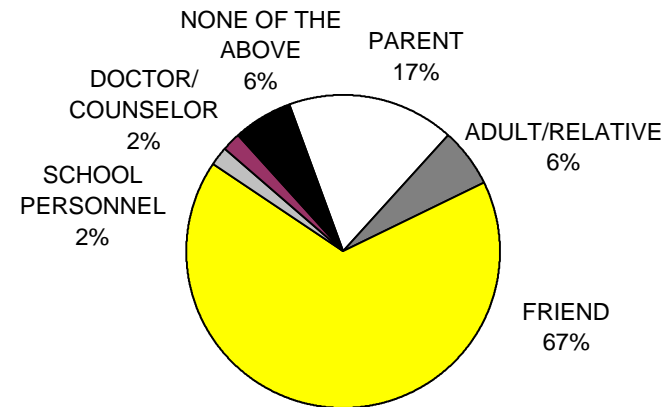
ALL

## ■ Other Drug Use

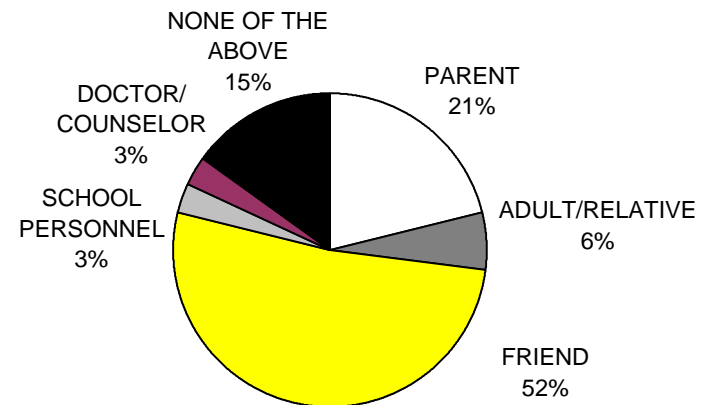
- **Students are more likely to talk with friends than adults about a drug problem.** Two-thirds (67%) of female students and half (52%) of male students would most likely talk to a friend about a drug problem. Students would more likely talk to a parent than another adult about a drug problem.

**If you had a problem with tobacco, alcohol, or other drugs, who would you be most likely to talk to about it?**

### FEMALES



### MALES





## ✓ Attitudes and Perceptions about Alcohol, Tobacco, and Other Drug Use

The questions in this section ask students how easy it is to get alcohol, tobacco, and other drugs, whether they think it is wrong for someone their age to use alcohol, tobacco, and other drugs, how wrong their parents and other adults in their community think it is for someone their age to use alcohol, tobacco, and other drugs, how harmful they think it is to use alcohol, tobacco, and other drugs.

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- **Disapproval of alcohol, tobacco, and other drug use:** Peer disapproval of substance abuse is inversely related to adolescents' reports of use. For example, multiyear tracking of the results of the Monitoring the Future Survey indicates that the prevalence of marijuana use among youth declines as the percentage of youth expressing disapproval of marijuana increases; similarly, an increase in the prevalence of marijuana use among youth during the early 1990s coincided with an apparent decline in the percentage of parents and peer expressing strong disapproval.<sup>33</sup>
- **Perceived harmfulness of alcohol, tobacco, and other drug use:** The perception of risk in using alcohol and other drugs is an important factor in decreasing use. Data have shown that as perception of harmfulness decreases, there is a tendency for use to increase.<sup>33</sup> Therefore, it is important for youth to be informed of the risks of using alcohol, tobacco, and other drugs.
- **Perceived availability of alcohol, tobacco, and other drugs:** The more available alcohol, tobacco, and other drugs are in a community, the higher the risk that young people will use them. Even when youth just think that substances are available, a higher rate of use is often observed.<sup>34</sup>

## ■ Disapproval of Alcohol, Tobacco, and Other Drug Use

- Most students think the adults in their neighborhood and their parents think it is wrong for kids their age to use alcohol, cigarettes, or marijuana.
- Younger students more than older students think that their parents and other adults think it is wrong for them to use alcohol, cigarettes, or marijuana. For example, 90 percent of 8th graders think that their parents think it is wrong for them to use cigarettes, compared to 72 percent of 12th graders.

DISAPPROVAL OF ATOD USE	GRADE					GENDER		ALL
	8	9	10	11	12	F	M	
Percent of students who think the adults in their neighborhood think it is <i>wrong or very wrong</i> for kids their age to:								
Smoke cigarettes	83	79	73	68	58	75	70	73
Drink alcohol	85	82	78	72	66	81	73	77
Use marijuana	89	86	82	81	76	87	79	83
Percent of students who think their parents think it is <i>wrong or very wrong</i> for them to:								
Smoke cigarettes	90	87	84	79	72	84	82	83
Drink alcohol	86	83	79	70	60	79	73	76
Use marijuana	93	91	87	85	82	90	86	88

## ■ Disapproval of Alcohol, Tobacco, and Other Drug Use

- More students think that it is wrong for kids their age to use LSD, cocaine, amphetamines or other illegal drugs than cigarettes, alcohol, or marijuana.. For example, 84 percent of students think using LSD, cocaine, amphetamines, etc. is wrong compared to only 47 percent for alcohol, 57 percent for cigarettes, and 58 percent for marijuana

DISAPPROVAL OF ATOD USE	GRADE					GENDER		ALL
	8	9	10	11	12	F	M	
Percent of students who think it is <i>wrong or very wrong</i> for kids their age to:								
Smoke cigarettes	69	64	56	49	46	57	57	57
Drink alcohol	64	55	44	37	32	48	46	47
Use marijuana	73	62	54	50	50	62	55	58
Use LSD, cocaine, amphetamines, or another illegal drug	87	84	83	83	81	88	80	84



- **great risk in smoking cigarettes than using marijuana.**  
example, 61 percent of students think that there is great risk in smoking one or two packs per day compared to 44 percent of great risk in using marijuana regularly.

HARMFULNESS	GRADE				GENDER		
	8	10	11		F	M	
Percent of students who think that there is in harming themselves from:							
of cigarettes/day	56	63	66		66	57	
Drinking one or two alcoholic beverages nearly	26	28	31	31		24	29
twice	25	17	16		18	17	
Using marijuana regularly	57	41	40		51	38	



## ■ Perceived Availability of Alcohol, Tobacco, and Other Drugs

- **Cigarettes are easy to get.**

Overall, 74 percent of students report that cigarettes are easy to get, compared to 70 percent for alcohol, 62 percent for marijuana, and 27 percent for cocaine, LSD, or amphetamines.

PERCEIVED AVAILABILITY OF ATOD	GRADE					GENDER		
	8	9	10	11	12	F	M	ALL
Percent of students who report that it is <i>easy or very easy</i> to get:								
Cigarettes	52	66	77	84	93	74	74	74
Alcohol	56	65	72	76	83	69	70	70
Marijuana	39	56	67	72	78	59	64	62
Cocaine, LSD, or amphetamines	16	24	30	31	36	25	29	27



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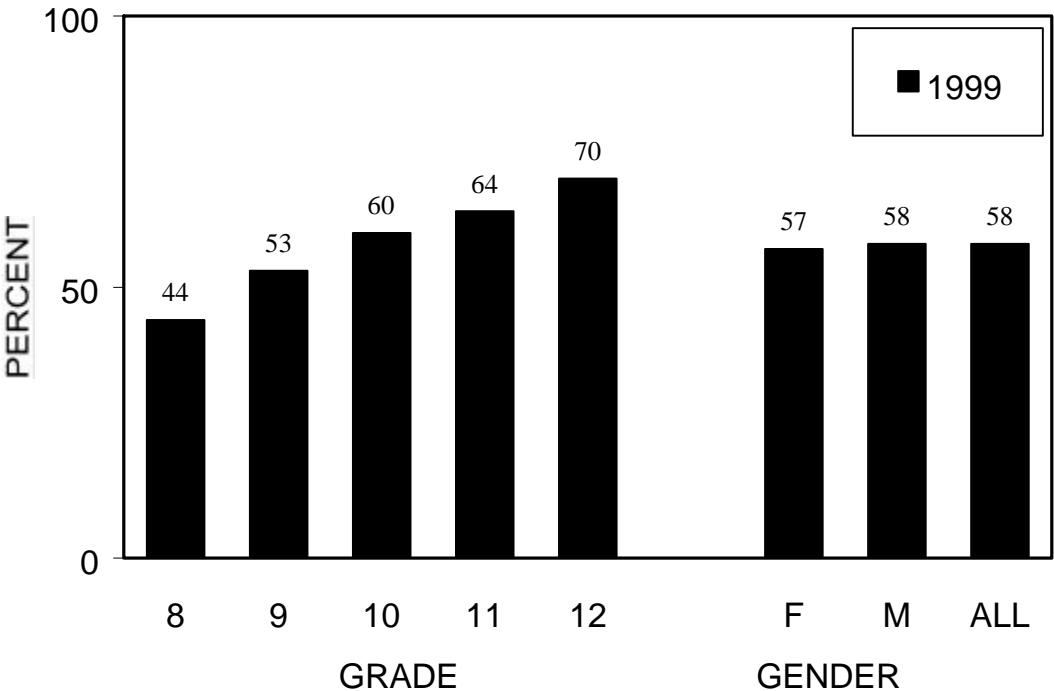
**adult who uses illegal drugs.**  
Overall, 58 percent of students

has used an illegal drug during  
the past year.

**More older students than**

**adult who uses illegal drugs.** In  
reported knowing an adult who  
has used an illegal drug during  
percent of 8th graders.

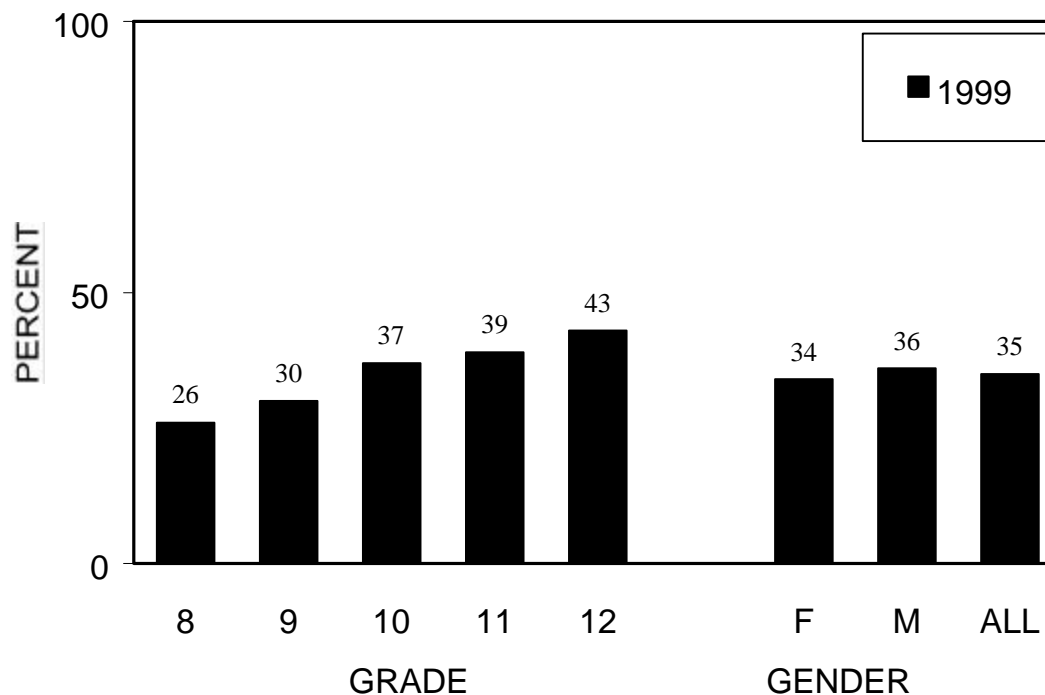
**Percent of students who know an adult who has used marijuana,**



## ■ Perceived Availability of Alcohol, Tobacco, and Other Drugs

- **Over one-third of students know an adult who sells drugs.**  
Overall, 35 percent of students reported knowing an adult who has sold drugs during the past year.

**Percent of students who know an adult who has sold drugs during the past year.**





## ✓ Sexual Behavior

The questions in this section ask students whether they have received information about AIDS or HIV infection, whether they have had sexual intercourse, the age at which they first had sex, the frequency with which they have sex, with whom they have sex, whether they have ever been forced to have sex, and whether they use contraception.

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- **Early sexual activity** is associated with unwanted pregnancy and sexually transmitted diseases (STD), including HIV infection, and negative effects on social and psychological development.<sup>35</sup> Number of sexual partners and age at first intercourse are associated with STD. Alcohol and drug use may serve as predisposing factors for initiation of sexual activity and unprotected sexual intercourse.<sup>36</sup> Of the 12 million new cases of STD per year in the United States, 25 percent are among teens.<sup>37</sup> STD may result in infertility and facilitation of HIV transmission and may have an adverse effect on pregnancy outcome and maternal and child health.<sup>35</sup>
  
- **AIDS** is the sixth leading cause of death for youth aged 15 to 24 in the United States.<sup>6</sup> It is estimated that 25 percent of all new cases of HIV each year occur in people aged 13 to 21.<sup>37</sup> While heterosexual transmission was once uncommon, recent trends indicate that growing numbers of individuals are at risk of contracting HIV in this way. Many people, especially adolescents, do not have the knowledge, awareness, and skills necessary to prevent their becoming infected. Besides abstinence, condom use is currently the most effective means of preventing sexual transmission of HIV.

In Vermont, 350 residents were diagnosed as having AIDS as of June 30, 1999.<sup>38</sup> Up to eight times this number may be infected with HIV, and many of these people may not be aware of their infection. Many more Vermonters are at risk of acquiring HIV infection through unprotected sex or intravenous drug use. No area of the state remains unaffected.
  
- **Teen Pregnancy:** Approximately one million teenage girls in the United States become pregnant each year and about half of them give birth.<sup>39</sup> One-third of all unintended pregnancies occur among teenagers, and 75 percent of teenage pregnancies occur among adolescents who are not using contraception.<sup>40</sup> In 1997, the teen pregnancy rate in Vermont was 23.0 pregnancies per 1,000 girls age 15 to 17, which has dropped since 1991 (37.8 pregnancies per 1,000).<sup>41</sup>

## ✓ Sexual Behavior (cont'd)

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- **Gay and Lesbian Youth:** Although many lesbian, gay, and bisexual adolescents lead happy and healthy lives, others face tremendous challenges to growing up physically and mentally healthy. Compared to heterosexual youth, lesbian, gay, and bisexual young people are at higher risk for depression, alcohol and other drug use, suicide, HIV infection, and other sexually transmitted diseases. Suicide is the leading cause of death among this group. They are two to three times more likely to attempt suicide than their heterosexual peers and may account for 30 percent of suicides among youth annually.<sup>42</sup>
- 

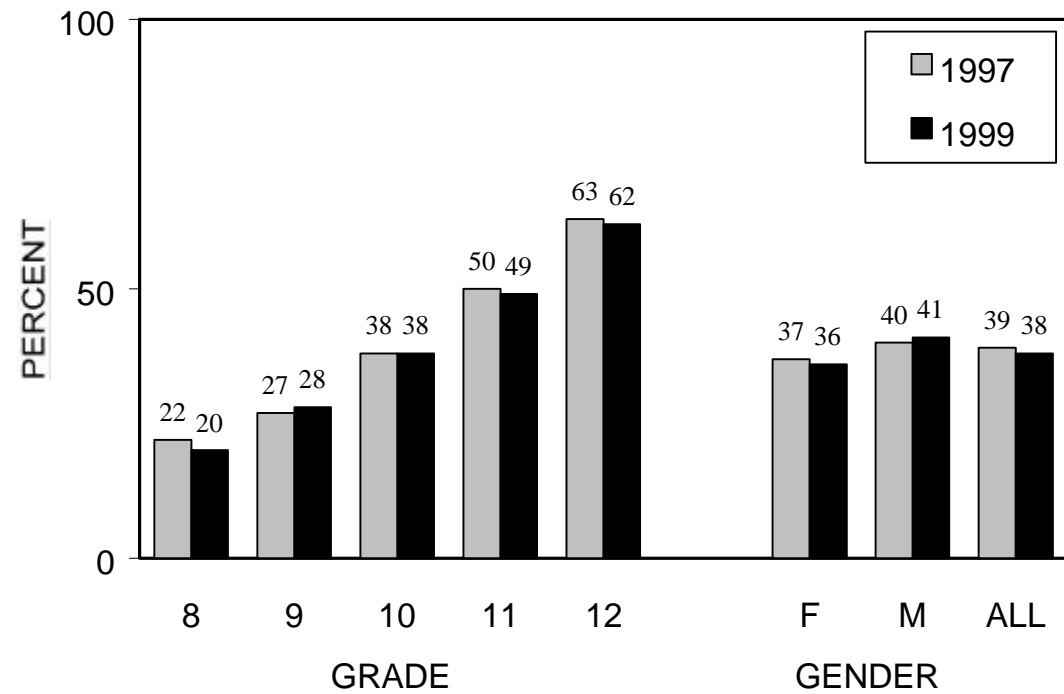
### **Related *Healthy Vermonters 2000* Goals:**

- Increase percent of schools that offer education programs on sexually transmitted diseases to 100 percent.
- Increase percent of schools with HIV education to at least 95 percent.
- Increase percent of sexually active adolescents who use condoms to at least 75 percent.

## ■ Sexual Behavior

- **Over one-third of students have had sex.** In 1999, 38 percent of students reported having had sexual intercourse.
- **One out of five (20%) 8th graders have had sex.**

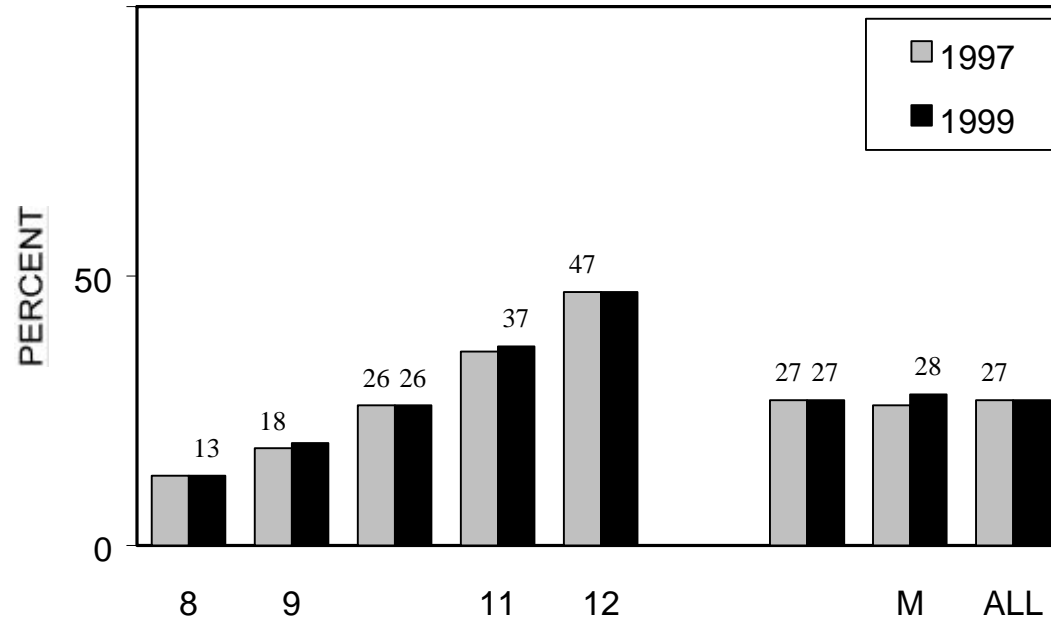
Percent of students who have ever had sexual intercourse



## ■ Sexual Behavior

- **Over one-fourth of Vermont students are sexually active.** Overall, 27 percent of students reported having had sex during the past 3 months.
- **More older students than younger students are sexually active.** In 1999, 47 percent of 12th graders have had sex during the past 3 months, compared to 13 percent of 8th graders.

Percent of students who have had sexual intercourse during the past 3 months





## ■ Sexual Behavior

- **Males have sex earlier than females.** Males were two and half times as likely as females to have had sex prior to age 13 (10% vs 4%).
- **Almost one-third (31%) of sexually active students use alcohol or drugs prior to sex.**
- **Six out of ten sexually active students use condoms.** Overall, 62 percent of sexually active students used a condom during their most recent sexual experience.

SEXUAL BEHAVIOR	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who:</b>									
<b>First had sexual intercourse before age 13</b>	10	8	7	6	6	4	10	8	8
<b>Have ever been forced to have sexual intercourse</b>	4	3	6	6	7	6	4	5	8
<b>Used drugs or alcohol before their most recent sexual experience*</b>	32	26	31	30	32	25	36	31	28
<b>Used a condom during their most recent sexual experience*</b>	68	70	66	60	54	57	66	62	60
<b>Have been pregnant or have impregnated someone</b>	2	3	3	4	7	4	4	4	4

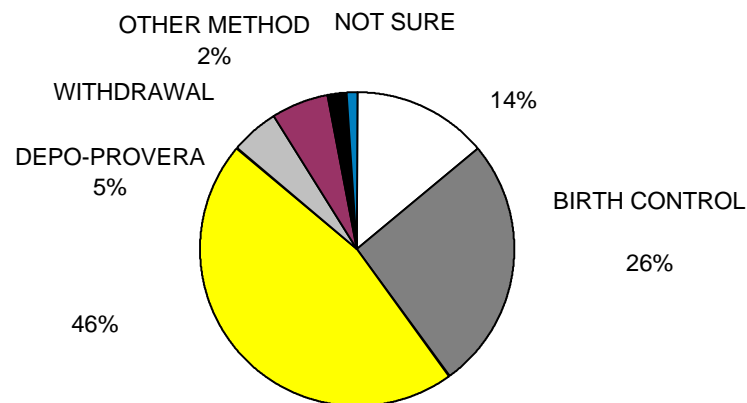
\*Includes only students who said that they have had sexual intercourse

## Sexual Behavior

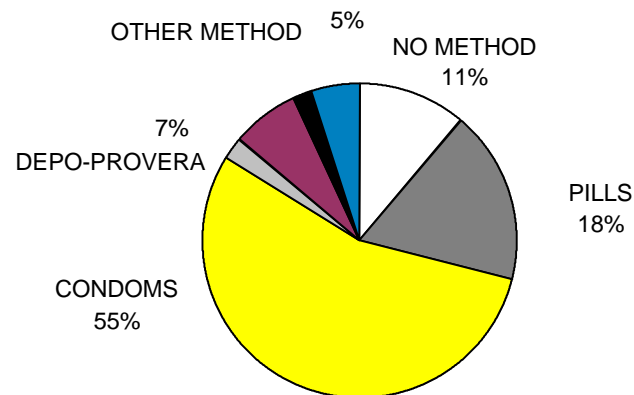
- Condoms are the most commonly used contraceptives.**  
Overall, 51 percent of students used condoms to prevent pregnancy the last time they had sex.
- Many students do not use any method to prevent pregnancy.**  
Overall, 12 percent of students did not use any method to prevent pregnancy the last time they had sex, and 3 percent were not sure what method was used.

**What method did you or your partner use to prevent pregnancy the last time you had sexual intercourse?**  
**(only among those students who have ever had sex)**

### FEMALES



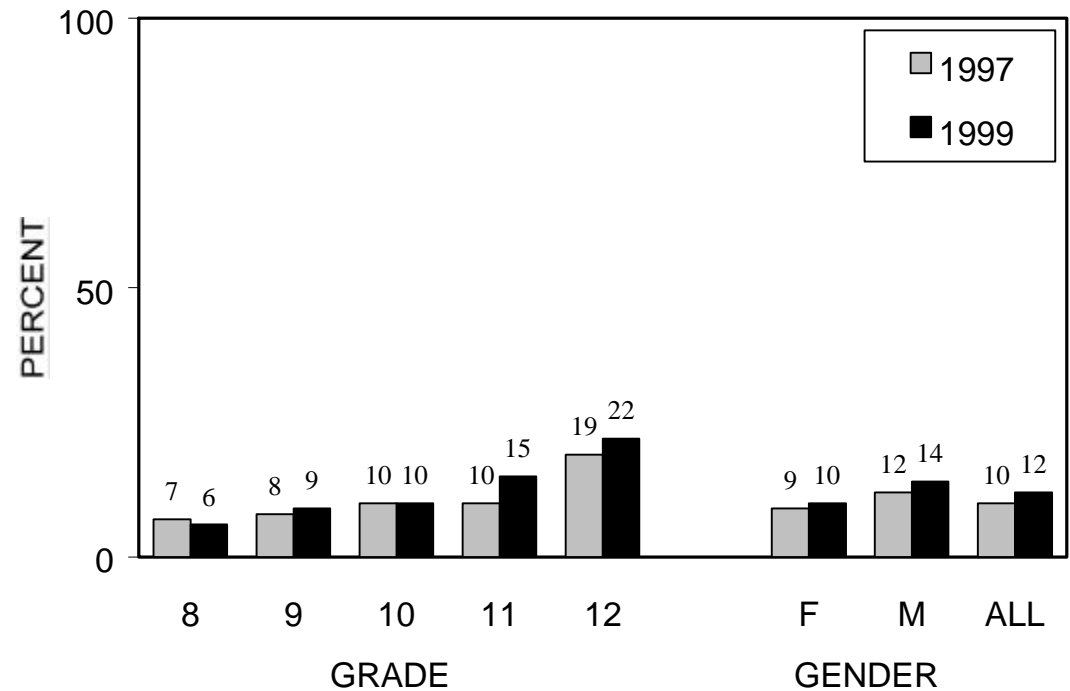
### MALES



## Sexual Behavior

- Overall, 12 percent of students have had sexual intercourse with four or more people in their lifetime. Similarly, in 1997 10 percent of students had sex with four or more people.

Percent of students who have had sexual intercourse with four or more people during their lifetime



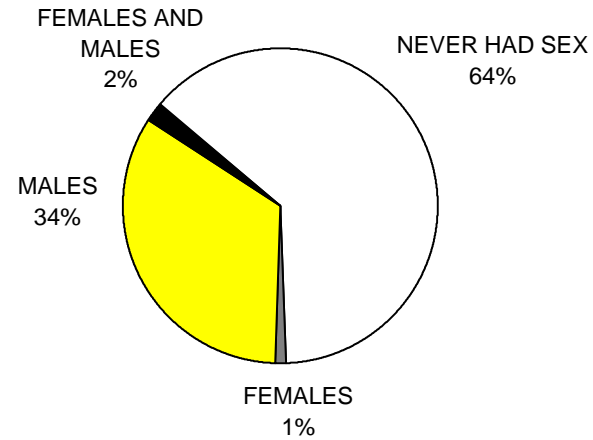
## ■ Sexual Behavior

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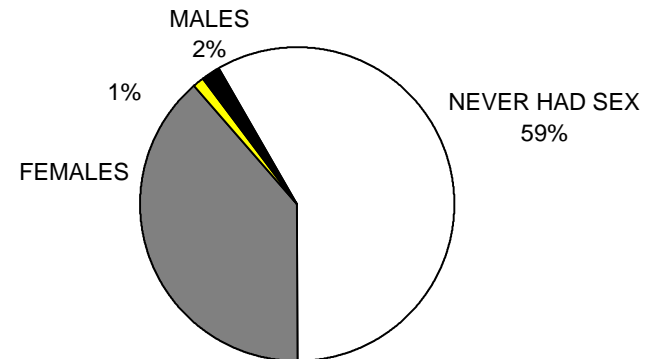
- Overall, 3 percent of students have engaged in same gender sexual intercourse.

The persons with whom you have had sexual intercourse are:

### FEMALES



### MALES

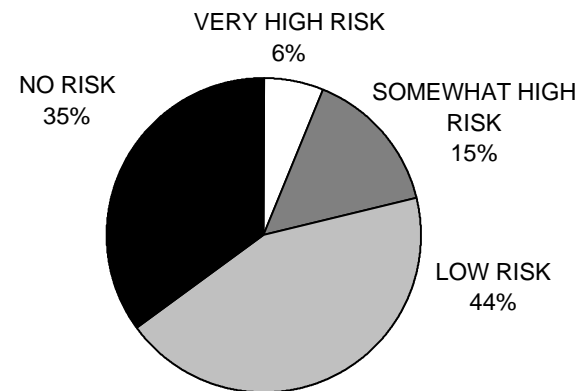


## ■ Sexual Behavior

- **More females than males talk with their parents about HIV infection.** Almost two-thirds (63%) of female students, compared to 56 percent of male students have talked with their parents about HIV or AIDS.
- **Overall, 65 percent of students perceive that they have at least some risk for getting HIV infection.**

HIV EDUCATION	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who:</b>									
<b>Have received education about HIV or AIDS at school</b>	82	89	93	94	94	91	89	90	91
<b>Have talked with parents or other adults in their family about HIV/AIDS</b>	51	56	64	62	65	63	56	59	59
<b>Perceive that they have at least some risk for getting HIV infection or AIDS</b>	61	64	66	67	69	62	68	65	68

### Students' perceived risk for getting AIDS or HIV infection





## ✓ Body Weight and Nutrition

This section asks students their height and weight, how they feel about their weight and what, if anything, they are doing to control

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- and extreme obesity appear to be increasing by as much as 39 percent and 64 percent, respectively, among adolescents aged 12 to 17 in the United States. Overweight and obesity acquired during childhood or adolescence may persist into adulthood, increasing later risk for chronic conditions such as coronary heart disease, high blood pressure,<sup>44</sup> Children and adolescents

45

O  
psychological and social consequences.<sup>46</sup>  
disorders such as anorexia nervosa and bulimia.<sup>47,48</sup>  
development of these two health problems and comprise 90 to 95 percent of all patients with eating disorders.<sup>49</sup>

### **Nutrition:**

that are important for good health. Dietary patterns with higher intakes of fruits and vegetables are associated with a variety of health benefits, including a decreased risk for some types of cancer.<sup>50</sup> Only 44 percent of male adolescents

vegetables and fruits set by the Dietary Guidelines for Americans.<sup>51</sup>  
for adolescents<sup>52</sup>

females do not meet dietary recommendations for calcium intake.<sup>53</sup>

maintenance of bones and teeth;<sup>44</sup>

factor in the development of osteoporosis.<sup>54</sup>

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### ***Healthy Vermonters 2000 Goals:***

Increase average intake of fruits, vegetables, and legumes to five or more servings a day.

Increase average intake of grains to six or more servings per day.

## ■ Body Weight

- **More younger students than older students are at risk for being overweight.** In 1999, 19 percent of 8th graders were between the 85th and 95th body mass index percentile, compared to 11 percent of 12th graders.
- **Overall, 8 percent of students are overweight.**

BODY WEIGHT	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
<b>Percent of students who are at risk for being overweight (85<sup>th</sup> Body Mass Index Percentile*)</b>	19	15	15	14	11	12	18	15	NA
<b>Percent of students who are overweight (95<sup>th</sup> Body Mass Index Percentile*)</b>	8	9	8	7	7	6	9	8	NA

\*Body mass index is calculated as weight in kilograms divided by the square of the height in meters.



## ■ Body Weight

- More females than males think they are overweight and are** . In 1999, 39 percent of female students

overweight, compared to 23 percent of male students. The

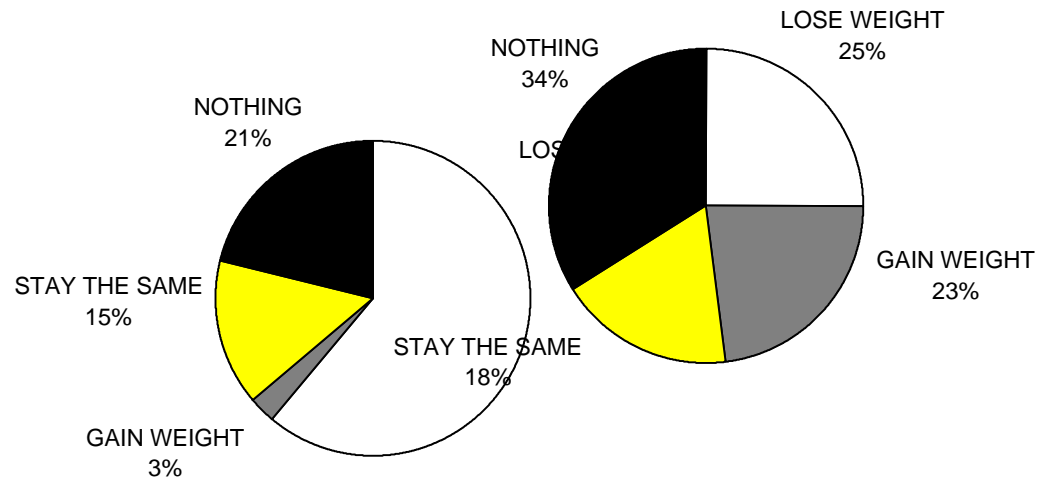
males was similar in 1997 (38% vs 23%). In addition, 61 percent

lose weight, compared to only 25 percent of male students. This

(60% vs 24%).

BODY WEIGHT							
	GRADE				M		1999
	8	9	11	12			
<b>Percent of students who describe themselves as:</b>							
	17	16	14	17	19		16
<b>About the right weight</b>	52		53	56	49 58		30
<b>Overweight</b>		30	32	31	39		30 30
<b>are:</b>							
<b>Trying to lose weight</b>		41	44	41	61		42 42
	10	14		14 15	23		13
<b>Trying to stay the same</b>	17		17	16	15 18		18
<b>Doing nothing about</b>	30	27		28 28	34		27

- **More males than females are trying to gain weight.** Male students were almost eight times more likely than female students to be trying to gain weight (23% vs 3%). Similarly, 24 percent of male students in 1997 were trying to gain weight, compared to 4 percent of female students.



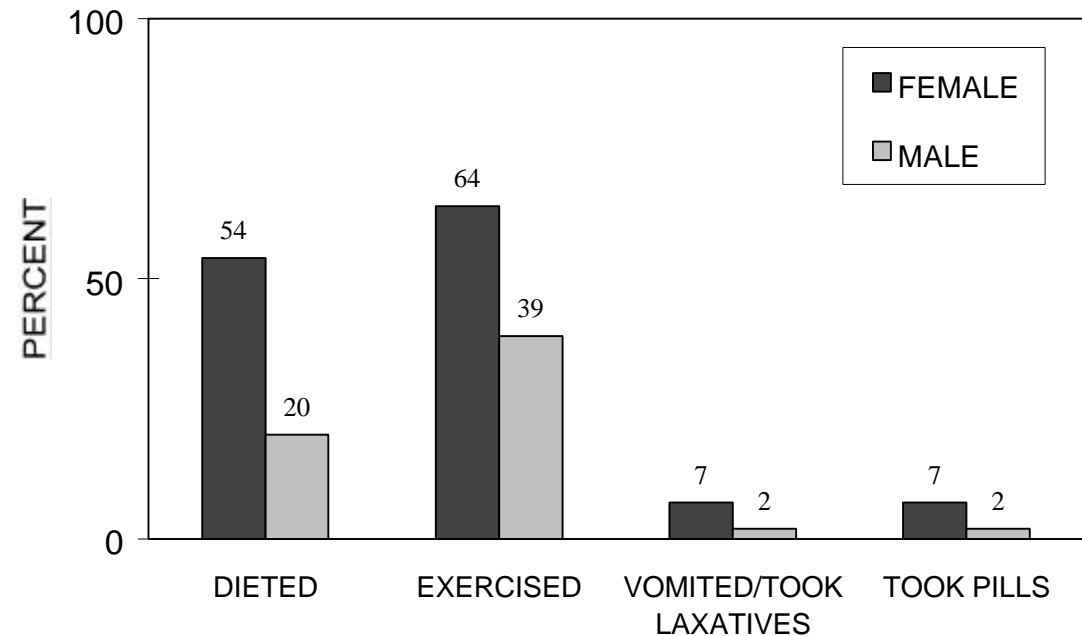
**What are students trying to do about their weight?**  
**FEMALES**

**MALES**

## ■ Body Weight

- **More females than males are trying to control their weight.** Female students were more likely than male students to have dieted (54% vs 20%), exercised (64% vs 39%), vomited or taken laxatives (7% vs 2%), and taken diet pills (7% vs 2%) to try and control their weight.

**What females and males did during the past 30 days to control their weight**



## ■ Nutrition

- Overall, 45 percent of students eat two or more servings of fruit or fruit juice daily.
- Overall, 14 percent of students eat three or more servings of vegetables daily.
- Overall, 33 percent of students eat five or more servings of fruits and vegetables daily. In 1997, 40 percent of students ate five or more servings of fruits and vegetables per day\*.
- Over one-fourth (27%) of students drink 3 or more glasses of milk daily. In 1999, 34 percent of male students drank three or more glasses of milk per day, compared to 20 percent of female students.

FRUITS, VEGETABLES & MILK CONSUMPTION									
	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who:									
Eat 2 or more servings of fruit or fruit juice per day	47	44	46	46	42	44	46	45	NA
Eat 3 or more servings of vegetables per day	16	14	16	14	12	13	15	14	NA
Eat 5 or more servings of fruits and vegetables per day	36	32	34	34	29	32	34	33*	40*
Drink 1 or more glasses of milk per day	64	64	61	59	57	55	67	61	NA
Drink 3 or more glasses of milk per day	33	28	28	25	20	20	34	27	NA

\*Questions regarding fruit and vegetable consumption were modified in 1999; therefore, comparisons with previous data should be made with caution.

## ✓ Physical Activity

This section asks students how often they engage in vigorous and moderate physical activities, and school-based physical activities including physical education classes and sports teams. Students are also asked how often they watch television and play on the computer for fun or play video games.

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- **Regular physical activity** helps build and maintain healthy bones and muscles, control weight, build lean muscle, and reduce fat; reduces feelings of depression and anxiety; and promotes psychological well-being.<sup>55</sup> In the long term, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.<sup>55</sup>
  - **School physical education classes:** Major decreases in vigorous physical activity occur during grades 9 through 12, particularly for girls; by 11th grade, more than half of female students in the US are not participating regularly in vigorous physical activity.<sup>55</sup> School physical education classes can increase adolescent participation in moderate to vigorous physical activity<sup>56, 57</sup> and help adolescents develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.<sup>58</sup> Across the US, daily participation in physical education class has dropped from 42 percent in 1991 to 25 percent in 1995.<sup>55</sup>
  - **Television viewing** is the principal sedentary leisure time behavior in the US. Studies have shown that television viewing in young people is related to obesity<sup>59</sup> and violent or aggressive behavior.<sup>60, 61</sup> Using the computer for fun and playing video games have become increasingly common sedentary leisure time activities among young people as well.
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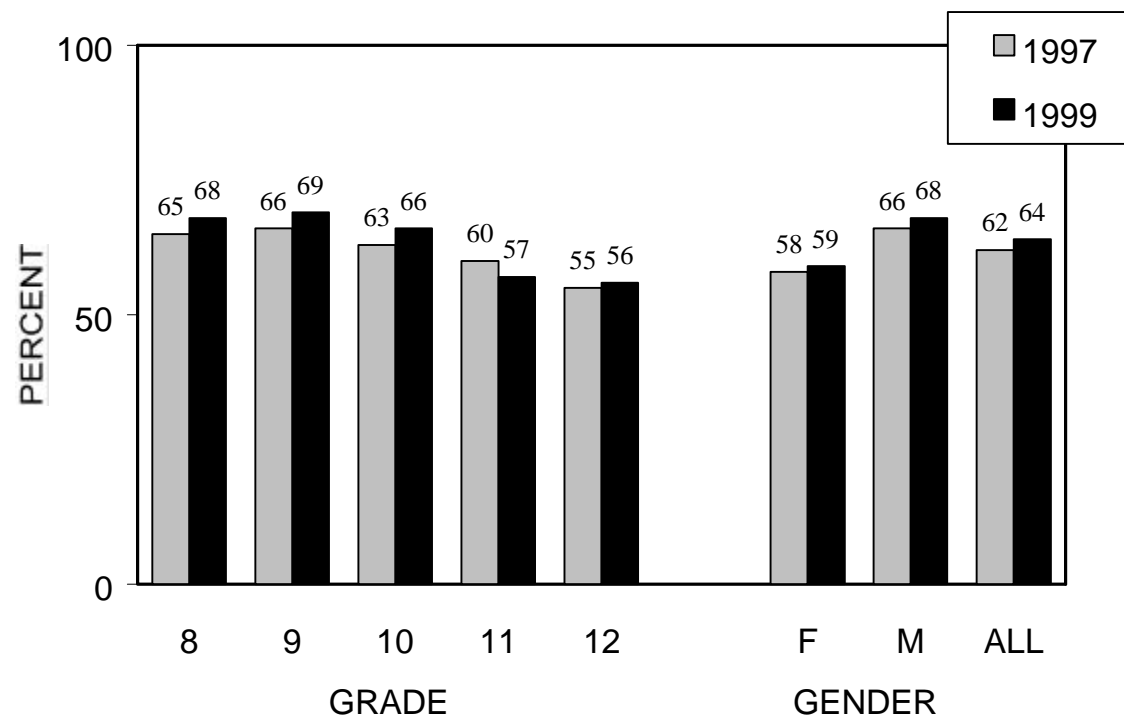
### **Related *Healthy Vermonters 2000* Goals:**

- Increase the proportion of people who exercise regularly (at least 30 minutes, five or more times per week) to 30 percent.

## ■ Physical Activity

- **Almost two-thirds of students participated in aerobic exercise.** Overall, 64 percent of students participated in three or more days per week of aerobic exercise, similar to 62 percent of students in 1997.
- **Females participate in aerobic exercise less often than males.** Over half (59%) of female students exercised aerobically three or more days per week, compared to over two-thirds (68%) of male students.

Percent of students who participated in aerobic exercise\* three or



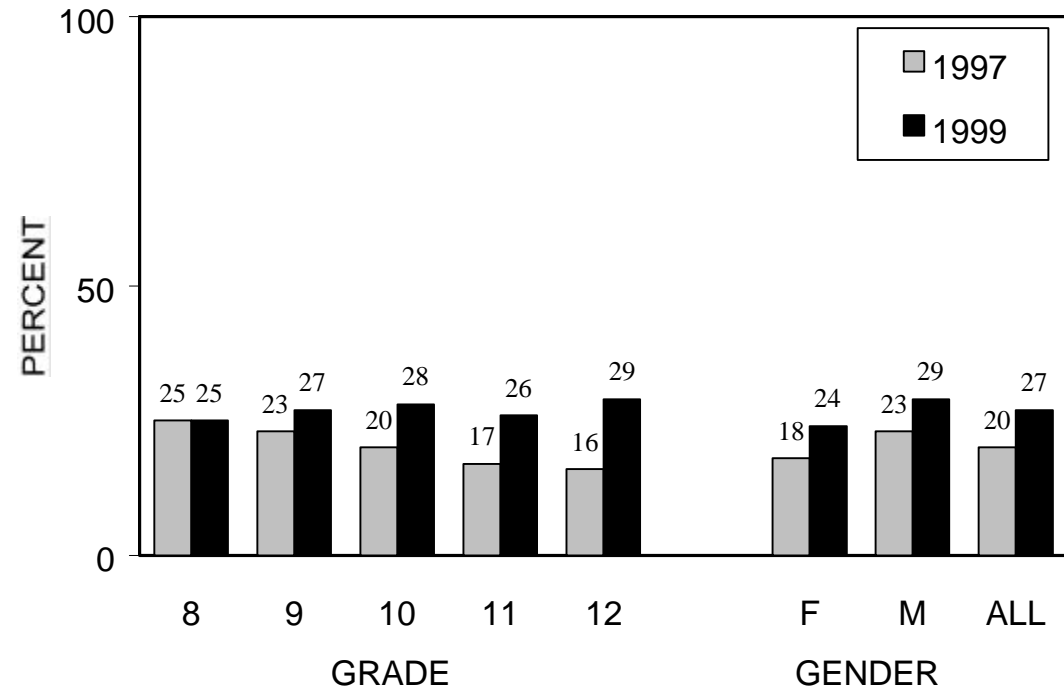
more days during the past 7 days

\*Activities that caused sweating and hard breathing for at least 20 minutes.

## ■ Physical Activity

- Overall, 27 percent of students exercised moderately five or more days per week.
- Females participate in moderate exercise slightly less often than males. In 1999, 24 percent of female students exercised moderately five or more days per week, compared to 29 percent of male students.

Percent of students who exercised moderately\* five or more days during the past 7 days



\* Questions regarding moderate exercise were modified in 1999; therefore, comparisons with previous data should be made with caution. In 1999, moderate exercise included activities that did not cause sweating and hard breathing, such as bicycling, skating, and pushing a lawn mower for at least 30 minutes. In 1997, moderate exercise included walking or bicycling for at least 30 minutes.

## ■ Physical Activity

- **More PE in lower grades.** Nine out of 10 (92%) 8th graders, compared to only 18 percent of 12th graders, participated in at least one physical education class per week. The difference between 8th and 12th graders was similar in 1997 (91% vs 29%).
- **Overall, 61 percent of students participate in sports teams.**

<b>PHYSICAL EDUCATION &amp; SPORTS TEAM PARTICIPATION</b>									
	<b>GRADE</b>					<b>GENDER</b>		<b>ALL</b>	
	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>F</b>	<b>M</b>	<b>1999</b>	<b>1997</b>
<b>Percent of students who participated in:</b>									
<b>Physical education classes at least once during the past 7 days</b>	92	58	48	22	18	46	52	49	55
<b>Physical education classes five days during the past 7 days</b>	26	38	29	14	11	22	26	24	25
<b>One or more sports team</b>	70	62	60	58	52	58	63	61	57



## ■ Physical Activity

- Over one-fourth (28%) of students watch three or more hours of TV per day.
- More male students than female students spend three or more hours per school day playing video games or on the computer. Males were three times more likely to play on computer/video games three or more hours per school day than females (18% vs 6%).
- Overall, 18 percent of students spend five or more hours per school day watching TV or playing video games/computer.

TV AND COMPUTER GAMES	GRADE					GENDER		ALL	
	8	9	10	11	12	F	M	1999	1997
Percent of students who:									
Watch 3 or more hours of TV per day	36	30	27	23	23	24	32	28	NA
Play on computer/video games 3 or more hours per school day	16	12	11	9	12	6	18	12	NA
Spend 5 or more hours per school day watching TV or playing on the computer	24	20	17	14	15	12	24	18	NA



## ✓ Other Risk and Resiliency Measures

This section asks students about the grades they receive in school and how often their parents talk to them about school.

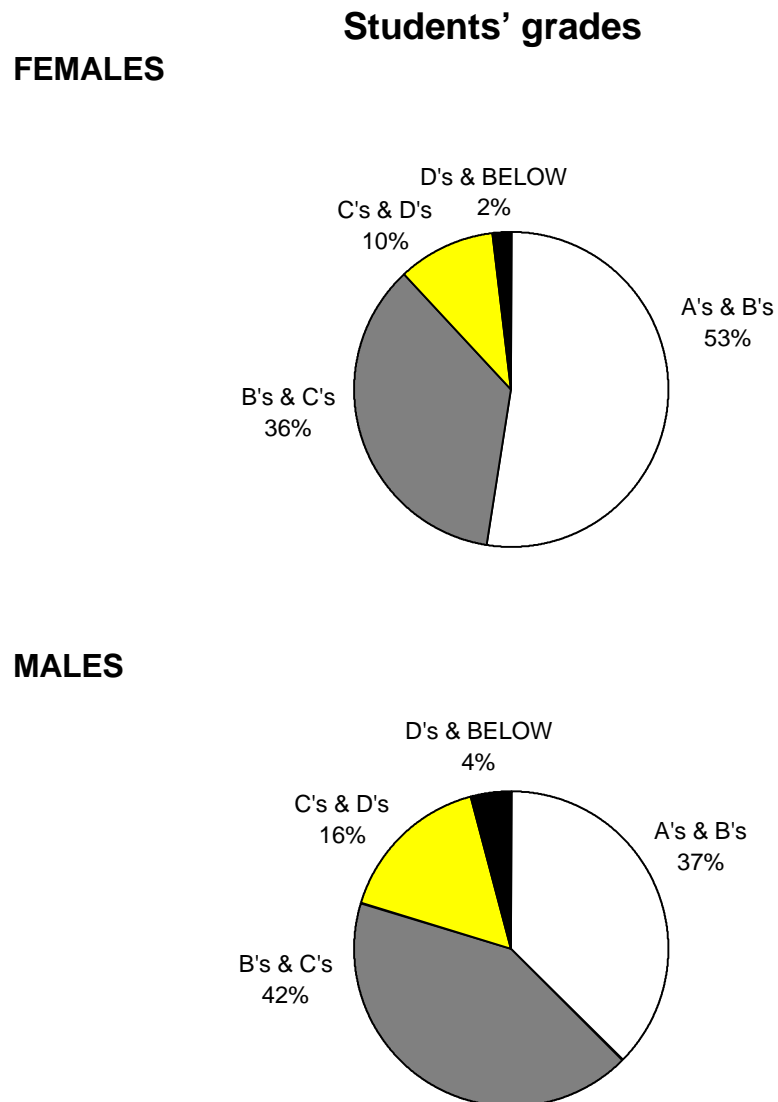
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- **Grades in School:** Above average school performance is viewed as one of many developmental assets (i.e., factors promoting positive youth development) for youth.<sup>62</sup> Based on a survey of more than 250,000 youth across the United States, 47 percent of 6th to 12th grade students report that their school performance is above average.<sup>62</sup>
- **Parents Involvement in School:** A national study of adolescent health found that adolescents who reported a “connectedness” to their parents, family, and school were the least likely to engage in risky behaviors.<sup>63</sup> Parental expectations regarding school achievement were also associated with lower levels of risk behaviors. Similarly, parental involvement in helping adolescents succeed in school is viewed as one of many developmental assets for youth.<sup>62</sup> Only 27 percent of 6th to 12th grade students surveyed across the United States reported that their parents are involved in helping them succeed in school.<sup>62</sup>

## ■ Other Measures of Risk and Resiliency

- **The majority of students receive above average grades.** Overall, 84 percent of students reported receiving C's and above.

- **Females receive better grades than males.** Over half (53%) of female students reported receiving mostly A's and B's, compared to 37 percent of male students

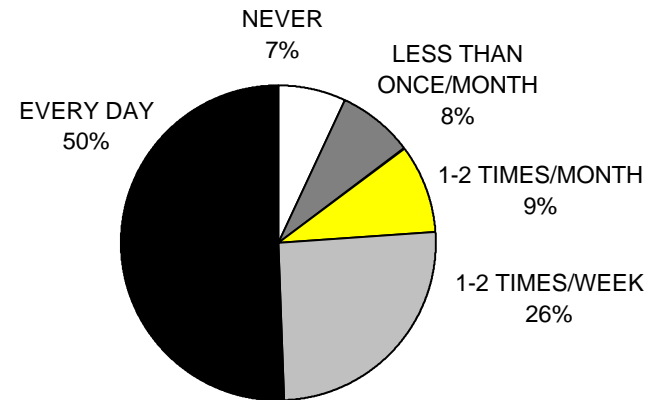


## ■ Other Measures of Risk and Resiliency

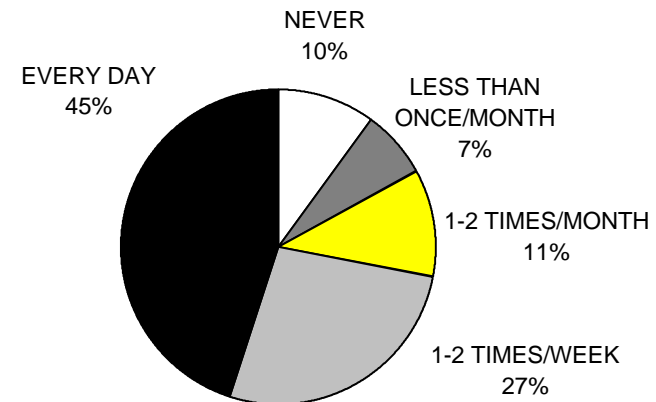
- **Almost three-fourths of students's parents talk with them about school weekly or more often.** Overall, 48 percent of students reported that their parents talked with them daily about school and 26 percent talked with them once or twice a week.
- **Some parents rarely or never talk with their children about school.** Overall, 8 percent of students reported that their parents never talk with them about school and 8 percent reported that their parents talk with them about school less than once a month.

**How often does one of your parents talk with you about what you are doing in school?**

### FEMALES



### MALES





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